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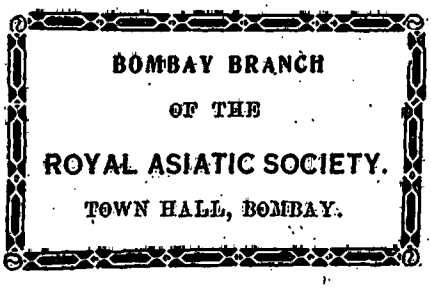

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SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1942

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UNITED STATES NATIONAL MUSEUM,
UNDER DIRECTION OF THE SMITHSONIAN INSTITUTION,
Washington, D. C., October 15, 1942.

SIR: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1942.

Very respectfully,

ALEXANDER WETMORE,
Assistant Secretary.

DR. CHARLES G. ABBOT,
Secretary, Smithsonian Institution.

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REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1942

By ALEXANDER WETMORE

Assistant Secretary of the Smithsonian Institution, in Charge of the National Museum

OPERATIONS FOR THE YEAR

APPROPRIATIONS

FUNDS available for the preservation of the collections of the United States National Museum for the fiscal year ended June 30, 1942, were provided by the appropriation "Preservation of Collections, Smithsonian Institution," in the Executive and Independent Offices Act approved April 5, 1941. This appropriation covers the salaries of the administrative and technical staff, the subprofessional staff, and the clerical, watch, labor, and char forces, and includes a small sum for miscellaneous expenditures for supplies and equipment. Funds for the maintenance and operation of the Museum buildings were provided by an allotment from the appropriation "General Expenses, Smithsonian Institution." The printing and binding activities of the Museum were covered by an allotment from the appropriation "Printing and Binding, Smithsonian Institution." In addition to the funds indicated above, the Museum received from Public Act No. 200 approved August 1, 1941, certain sums for promotions for personnel. The appropriations and allotments for the work of the Museum and for maintenance and operation of our buildings are summarized as follows:

Preservation of collections (appropriation)	$626,720	
Public No. 200, approved Aug. 1, 1941	9,398	
Available for expenditure		$636,118
Maintenance and operation (allotment)	148,835	
Public No. 200, approved Aug. 1, 1941	1,025	
Available for expenditure		149,860
Printing and binding (allotment)		43,000
Total available for year		828,978

Changes in the various items are outlined as follows:

In the appropriation for Preservation of Collections the only change from the preceding year was an increase in the amount available for salaries, which was used entirely for promotions. There was no change in the number of personnel. The promotions were most welcome, since lack of funds for this purpose had constituted one of the most serious problems in the administration of the National Museum, as has been mentioned in many previous reports.

The allotment providing for maintenance and operation of buildings was $11,475 less than in the preceding year, owing to a nonrecurring appropriation of $12,500 for construction of a sewer, funds for which were available for the fiscal year 1941, when this work was finished. The funds received for promotions under Public Act No. 200 added $1,025, thus accounting for the difference of $11,475 in total appropriation. In this activity, as well as in Preservation of Collections, the only change from normal, therefore, was the receipt of money for promotions, there being no change in the number of personnel or in the amount available for general expenditures.

The allotment for printing and binding available to the Museum was increased by $12,750 over the amount available in the fiscal year 1941. In view of the large quantity of manuscript awaiting publication this increase was most welcome.

The need for more space for the Museum's collections becomes annually more acute, and the problem is one that can be met only by additional construction. The present war situation prohibits full consideration of the matter at this time, because any construction will require steel, cement, and labor now needed for the war effort. The question is therefore one to be deferred until building conditions permit. In the report for last year there was indicated the great increase in value of our national collections through the operations of extended war. This value rises yearly with the destruction that continues in the war zones, as this embraces injury not only to various museum collections but also to the original sources from which such collections are built. Occupation of island areas by armed forces or encroachment through the necessities of military development may unwittingly destroy forever species of animals and plants of restricted number and range. For example, Wake Island in the Pacific is the home of a flightless land rail that can easily be exterminated because of its limited range. What may become of the last individuals of the Sumatran rhinoceros under present conditions no one may prophesy. There are hundreds of species found under equally uncertain circumstances, so that it is fortunate to have examples of many of them in the Museum's collection where they will serve for future study and record not otherwise possible.

Under such circumstances our treasures in plant and animal life, living and fossil, in anthropology, in history, in art, and in engineering and the industries demand the most detailed and specific care so that, under the stress of the moment, they may not suffer neglect and damage. They comprise a trust that must be preserved for the culture and life of future generations in our nation.

COLLECTIONS

The impact of the war had no great effect this year on the receipt of specimens as additions to the vast and highly valuable collections in the United States National Museum. New materials accessioned came principally through expeditions financed and arranged by the Smithsonian Institution under funds contributed by the Institution or by its friends. Many individuals also made gifts of specimens that are much appreciated.

The total number received is about average for recent years. New material came in 1,388 separate accessions, with a total of 284,582 specimens distributed among the five departments as follows: Anthropology, 3,000; biology, 245,200; geology, 32,418; engineering and industries, 2,415; and history, 1,549.

For examination and report 1,142 lots of specimens were received, including the usual considerable variety of objects. A part of these was returned by request to the senders when examination was completed and report made, a part was consumed or otherwise destroyed during identification and analysis, and a part was presented by the senders to form addition to the permanent collections of the Museum. The specimens named included large sendings of plants, insects, mollusks, marine invertebrates, geological material, and a variety of other items.

Gifts of duplicates to schools, museums, and other institutions numbered 2,262 specimens. Exchanges of duplicate materials with other institutions and individuals amounted to 18,423 specimens, and 319 specimens were transferred to other governmental agencies. Loans for scientific study for the use of investigators outside of Washington totaled 47,947, the handling of these in packing, shipment, and subsequent return requiring a vast amount of labor.

Following is a summary of the entries now included in the Museum catalogs in all departments:

Anthropology	708,636
Biology	13,546,090
Geology	2,676,038
Engineering and industries	136,233
History	511,243
Total	17,578,240

EXPLORATIONS AND FIELD WORK

The year's explorations by members of the staff yielded much valuable new information and highly useful series of specimens in various fields. The work was financed mainly through funds provided by the Smithsonian Institution and by interested friends. With the active entry of this country into the war in December, the program for field activities was definitely curtailed. From that date expeditions were restricted to those working at the time or those required because of commitments previously made. Though the scope of the work was therefore decidedly less than in normal years, valuable results were obtained.

Walter W. Taylor, Jr., honorary collaborator in anthropology, completed archeological explorations around Cuatro Ciénegas in Coahuila, northern Mexico, which he inaugurated during the previous fiscal year. Excavations were made in "Fat Burro Cave" and "Nopal Shelter" in Canyon de Jora, situated about 21 miles west of Cuatro Ciénegas. He then moved camp to Sierra de San Vicente, 20 miles southeast of Cuatro Ciénegas, where he excavated a large site called "Frightful Cave," located in the only through-canyon in the San Vicente Range. This cave measured about 200 feet long and tapered in width from 30 feet at the entrance to 3 feet at the rear. The deposits ranged in depth from 10 to 3 feet, consisting of compact floors at the bottom over which were superimposed strata of fire-cracked stones, ash, and fiber. Upon completing these excavations, Mr. Taylor devoted about four weeks to the preservation and listing of the specimens recovered and to a reconnaissance and excavation of 16 burial niches in small canyons throughout the area.

Besides the customary artifacts of fiber, wood, stone, bone, and shell, Mr. Taylor found a desiccated infant burial wrapped in two layers of hide and mats. Other noteworthy specimens recovered from "Fat Burro Cave" consist of an atlatl, or throwing-stick foreshaft, with an arrow attached by sinew; a series of split-twig loops, comparable to those from the Big Bend area in Texas; stone projectile points similar to those from caves along the Pecos River, Tex.; and a few pieces of split-stitch basketry. From "Frightful Cave" he recovered twilled woven bags filled with buckeyes, grooved clubs, four distinct types of fiber sandals, twined woven mats, and aprons. All the material collected was packed and transported to Mexico City for inspection by the scientists of the Instituto Nacional de Antropología e Historia, where Mr. Taylor received every possible courtesy from the director of the Institute, Sr. Lic. Alfonso Caso, and the director of the Department of Prehispanic Monuments of the Institute, Sr. Ing. Ignacio Marquina. The expedition returned to the United States National Museum on September 1, 1941. At the

end of the year Mr. Taylor was preparing a detailed archeological report covering the work accomplished.

From the end of May to the middle of June 1942 Frank M. Setzler, head curator of anthropology, was detailed to the National Park Service to direct a rapid archeological reconnaissance within the canyons formed by the Yampa and Green Rivers in northwestern Colorado and eastern Utah, in order to locate and evaluate the prehistoric caves, shelters, and village sites within an area that may be inundated eventually if proposed dams are built along these rivers. The expedition traveled by boat through the various rapids within the canyon and discovered and tested numerous sites. A detailed report covering the results of these investigations was prepared and submitted to the National Park Service before the close of the year.

In the department of geology field trips to the West for fossil vertebrates and invertebrates were so successful that the value of such explorations to the Institution may again be stressed.

Dr. C. E. Resser, curator of invertebrate paleontology, accompanied by George Burke Maxey, of Missoula, Mont., spent the summer in Montana and the Canadian Rockies, with a brief collecting trip into the northern Wasatch Mountains in search of Cambrian fossils. In the Canadian Rockies they devoted the first two weeks to the study of Cambrian beds in the mountains adjacent to the Bow Valley, chiefly at Castle Mountain, and in the Valley of Ten Peaks at Moraine Lake, near which excellent fossils were found on Eiffel Peak. They chose the territory between Lake Louise and Field as likely to prove most productive, but before exploring it they made a brief trip over the new Jasper road but found that most sections were inaccessible from this highway. In fact, everywhere in this region work is most difficult from roads and camps, because nearly 2,000 feet of unfossiliferous quartzitic strata, fringing the valleys with great cliffs, must be climbed before a day's work can be begun; wherefore the only satisfactory way to study the geology of the Canadian Rockies is by pack train, with camps established along timberline.

Dr. Resser and Mr. Maxey spent more than a month in camp at the foot of Mount Stephen, three miles west of Field, working thence as far east as Lake Louise, and west beyond Emerald Lake. For nearly three-quarters of a century the fossil bed on Mount Stephen has been known to paleontologists throughout the world. The trail leading up from Field is only three miles long but climbs 2,700 feet, so that bringing fossils down becomes an arduous task. With permission of the Canadian National Park Service excellent material was collected here. On the first trip to this section Dr. Resser was accompanied by Prof. J. W. Laverdiére and Prof. F. Rasetti, of Laval University in Quebec, and Prof. L. G. Morin, of the University of Montreal, together with their assistants. On a second trip he was

assisted by Profs. Don and Velma Lentz, of the University of Nebraska.

Later Dr. Resser visited the Burgess Pass locality, where Dr. C. D. Walcott, former secretary of the Smithsonian Institution, discovered the most remarkable early fossils yet known. Collecting in the old quarry at Burgess Pass now is very difficult because of the great overburden above the fossil beds, but on the slopes above many trilobites may still be found.

Since it was not feasible to reach the sections adjacent to the Columbia River trench as planned, Dr. Resser took advantage of Mr. Maxey's precise knowledge of the northern Wasatch Mountains in Idaho and Utah and made a brief visit to that area. Excellent collections were made at Calls Fort north of Brigham, on High Creek east of Richmond in Cache Valley, and at Spence Gulch on the eastern side of the Bear River Range. No one had been able to find the last-named collecting locality until Bishop Spence, son of the man who originally accompanied Dr. Walcott in 1905, several years ago assisted Mr. Maxey in relocating it.

Dr. G. A. Cooper, associate curator of invertebrate paleontology, left Washington on June 10, 1941, with Dr. Josiah Bridge, of the United States Geological Survey, for Tazewell, Va., where he worked for three days with a party of Virginia geologists. After leaving Dr. Bridge in Bristol, Dr. Cooper continued on to meet Dr. N. D. Newell in Fort Worth, Tex., and collected in north-central Texas for three days with Dr. Ralph H. King, of the Kansas Geological Survey. After this he went to Marathon, Tex., where he spent a month collecting Permian limestone blocks containing silicified fossils. Dr. Newell left the party in Marathon in mid-July, and Dr. Cooper was then joined for ten days by Dr. C. O. Dunbar and P. E. Morris, of Yale University. Late in July he joined Mrs. J. H. Renfro and daughter at Fort Worth for investigations in the Pennsylvanian rocks of Jack County and in the Cretaceous rocks around Fort Worth. Here many interesting fossils were obtained.

Early in August Dr. Cooper proceeded to Ardmore, Okla., to collect Devonian and Ordovician fossils. Here he spent three days and then continued to Ada, Okla., where he was joined by Dr. C. G. Lalicker, of the University of Oklahoma, who guided him to numerous localities where free Pennsylvanian fossils can be collected. From Ada he went to Muskogee for a few days, with C. L. Foster as guide. Here a fine collection of Mississippian fossils was obtained. From Muskogee a short trip into southern Kansas was made to collect Pennsylvanian fossils. Then, after collecting Mississippian fossils near Vinita for several days, he headed east, with Corydon, Ind., as his destination, and after a day there with Guy Campbell he returned to Washington early in September.

His season's work resulted in four tons of blocks containing silicified fossils collected in the Glass Mountains, and many thousand specimens of free Pennsylvanian fossils obtained in north-central Texas and Oklahoma. The Museum now owns an important lot of Permian and Pennsylvanian fossils, the result of three seasons of collecting by Dr. Cooper in these fields.

Dr. Cooper also made a short trip into southern Pennsylvania in the middle of May with Dr. Charles Butts and Dr. Josiah Bridge to study Ordovician rocks.

Starting early in June 1942, C. W. Gilmore, curator of vertebrate paleontology, led a party to explore the Oligocene rocks of eastern Wyoming and western Nebraska, where good progress in the discovery of mammalian remains has already been reported. Mr. Gilmore had as assistant the experienced collector George H. Sternberg and was accompanied also by Alfonso Segura Paguaga, of the Museo Nacional, San José, Costa Rica. The account of these operations will be carried in next year's report.

As the field expedition in vertebrate paleontology under Dr. C. Lewis Gazin, associate curator, extended well into the present year, only brief mention was made of it in last year's report. The party was successful in obtaining some unusually good material of the smaller mammals, the most outstanding being the lower jaws and fragmentary parts of the skeleton of the rare edentate *Stylinodon*. Good materials were also secured of such larger perissodactyl forms as *Hyrachyus* and *Palaeosyops*. A large slab of turtle remains should make an interesting exhibition piece. A small collection of Paleocene mammals was obtained from the Alma formation in western Wyoming.

In the first half of the year Dr. W. F. Foshag, curator of mineralogy and petrology, was in Washington, devoting much of his time to activities relating to former strategic mineral investigations in Mexico. In February he returned to Mexico, under a cooperative arrangement with the U. S. Geological Survey and the Board of Economic Warfare, to direct further strategic mineral work. He continued in the field for the rest of the fiscal year.

In continuation of work begun last year by Dr. Alexander Wetmore, M. A. Carriker, Jr., in March began further studies and collections of birds in northeastern Colombia. From Codazzi in the Department of Magdalena he traveled into the mountains to establish a base that gave access to the higher peaks along the Venezuelan border. These investigations were supplemented by collections in the lowland areas, of value in connection with materials secured in March 1941 at Caracolicito in the drainage of the Río Ariguaní. As this work continued into the next fiscal year it will be reported on more fully there. These studies were carried on under the W. L. Abbott fund of the Smithsonian Institution.

From March 17 until May 15, 1942, Dr. Remington Kellogg, curator of mammals, with Watson M. Perrygo, scientific aide, as assistant, was engaged in excavating Rampart Cave, located in the lower cliff-forming member of the Middle Cambrian Peasley limestone on the south side of the lower end of the Colorado River canyon in the Boulder Dam National Recreational Area, Arizona. This was a cooperative project undertaken by the Smithsonian Institution and the National Park Service. The last-mentioned agency detailed Edward T. Schenk, senior geological foreman, Samuel D. Hendricks, assistant engineer, Dr. Gordon C. Baldwin, archeologist, Ray Poyser, boat pilot, and seven men from the Boulder City C.C.C. camp for intervals of varying length to assist in the work. Skeletal remains of ground sloths, mountain goats, pumas, marmots, skunks, and several species of birds, lizards, and snakes were obtained in an extensive deposit of ground-sloth dung. Part of the cave was left undisturbed to serve for future use should it be desired to develop a display for visitors.

Dr. Leonard P. Schultz, curator of fishes, spent the period from February 1 to May 26 working in Venezuela, in connection with the Department of State's program for promoting cultural relations with the other American countries. Two weeks were occupied in Caracas, where he consulted with men in the scientific groups, and the remainder of his time he spent in the Maracaibo Basin in studying the fish fauna of that region. His work there was made possible through the friendly cooperation of the Lago Petroleum Corporation at Maracaibo and Lagunillas. He spent eight days in the Andes in the valleys of the Río Motatán, Río Chama, Río Catatumbo, and Río Torbes and collected about 10,000 fish specimens, representing about 115 species, along with other natural-history material. The fish collection is the most complete one that has been made in this region and will afford information of great value in this field of zoology.

Dr. E. A. Chapin, curator of insects, in connection with this same program of the State Department, worked for six weeks in Colombia, during February and March. He spent approximately five weeks in and around Bogotá, mainly at the Instituto de Ciencias Naturales located at the University Center. Through the courtesy of Dr. Armando Dugand, director of the Instituto, his work was carried on with the close cooperation of Luis M. Murillo, chief entomologist of the Colombian Government, Francisco Otoya, assistant entomologist, and Hernando Osorno, preparator. Several field trips arranged and conducted by Sr. Murillo permitted Dr. Chapin to become personally acquainted with some of the major entomological problems of the country. These included investigations in the citrus regions near Cachetá, Pacho, and Guateque, and two trips into the páramo near Guasca. During the fifth week of his stay he visited the agricultural institute at Medellín, where work on the collection of insects is in

charge of Dr. F. L. Gallego. From Medellín the party, consisting of Sr. Murillo, Sr. Otoya, Sr. Cabal, an entomological student, and Dr. and Mrs. Chapin, went to Cali to see the Agricultural Experiment Station at Palmira. While in Cali Dr. Belisario Losada escorted the party on a collecting trip into the Cordilleras. They then returned to Bogotá for a final week of work at the Instituto. Special attention was given to the family Coccinellidae, one of considerable economic importance in Colombia, and plans were formulated for further collaboration by the Instituto and the United States National Museum, looking toward a monographic account of the Coccinellidae of Colombia.

C. V. Morton, assistant curator of plants, spent the months of October and November in Cuba, a trip sponsored by the National Museum and the Department of State, for the dual purpose of botanical field work and the furthering of cooperation with Cuban scientists. A part of his time was occupied in making partial catalogs of the ferns in various herbaria. Field work was undertaken in cooperation with the Cuban Department of Agriculture, and most of it was carried out with Sr. Acuña and Sr. Alonzo, of the Estación Agronómica at Santiago de Las Vegas. Collections were made in the mountainous part of Oriente, especially on the Sierra Nipe, and the northern slopes of the Sierra Maestra. Later, collections were made in the Trinidad Mountains of Las Villas, from the Harvard Botanical Garden at Soledad as a base, and in the Sierra de Los Órganos in Pinar del Río, through the friendly interest of the Colegio de La Salle of Habana. Altogether 6,000 specimens were collected, representing about 1,600 numbers.

Dr. E. H. Walker, assistant curator of plants, was occupied for a week in June in the Piedmont and the Blue Ridge Mountains of North Carolina and South Carolina, making botanical collections. Under Dr. Walker's leadership local field work has been carried on by members of the Conference on the District of Columbia Flora.

The Walter Rathbone Bacon Traveling Scholarship under the Smithsonian Institution was awarded to Philip Hershkovitz, of the University of Michigan, for faunal investigations on the distribution of mammals in Colombia. After a period of preparation in the National Museum, Mr. Hershkovitz left New York on November 8, 1941, for Barranquilla, Colombia, where his arrangements for field work were completed with the assistance of the Department of State, through the Hon. Nelson R. Park, American Consul. Field work began near Sabana Larga through the kind invitation of Mr. Crump and extended through the adjacent areas of the Department of Atlántico. In January he established a base near Caracolicito where he had information of an excellent area for such studies through a reconnaissance made there last year by Dr. Wetmore in connection with work on birds.

Mr. Hershkovitz's investigations extended from here to the southern flank of the Sierra Nevada de Santa Marta in the vicinity of Pueblo Bello. In June he was collecting at El Salado between Pueblo Bello and Valencia.

THE MUSEUM IN WARTIME

Entry of our country into war has brought change to all of us without exception and has had full reaction on the operation of the Museum laboratories, halls, and galleries under the Smithsonian Institution. Restriction in travel by rationing of gasoline and the rubber shortage, and the full occupation of people everywhere in the war effort, have brought rapid curtailment in the normal tourist visitors to Washington from hundreds of thousands to a few hundreds at most. Under this condition it is valuable to observe and record the considerable attendance of visitors to our buildings, full indication of the fact established in England in the early days of this war that public museums and galleries play an important part in the life of our people under the present stress. With long journeys out of the question because of lack of time and facilities the mental recreation and relief found in the exhibits maintained by the Smithsonian Institution have greater importance than ever before for the multitude of workers and residents in the crowded Washington area.

In this connection arrangement was made as soon as practicable to open our buildings on Sundays from 9 o'clock in the morning to 4:30 in the afternoon, shifting the weekly half day for which the public halls are closed from Sunday morning to Monday morning. Sunday attendances have ranged from 9,000 to 13,000 visitors, fully justifying the change. It has been interesting to observe the large number of service men among these, from the men who come to Washington on week-end furloughs. The change in hours has been of assistance also to those employed for long hours during the week in Washington offices by giving them opportunity to visit our halls.

Soon after the United States entered the war, work was started to safeguard employees and visitors to the Museum buildings against possible air raids. Steps were taken also to protect the buildings and their contents.

With the aid of engineers from the Public Buildings Administration areas were designated as air-raid shelters, and air-raid alarm gongs were installed in all the buildings. Air-raid shelter directional signs were posted in the exhibition halls as well as in the park south of the Smithsonian Building. At the same time there was set up the customary system of wardens and assistants, with duties assigned to all, these being developed and perfected through periodic drills. Boxes of sand and sand bags, with hand pumps and water barrels, were placed on all floors of the buildings, first-aid rooms were estab-

lished in the Natural History Building and the Engineering and Industries Building, and blackout screens were installed in all buildings in those rooms where 24-hour service must be maintained.

Important among other important safety measures was the removal of many tons of heavy storage racks containing geological and paleontological specimens from the fourth floor to the ground and second floors of the Natural History Building. Also, storage cases and many specimens were taken from other sections of the fourth floor to the second floor to an extent that allows free movement throughout the upper floor of the building in case of fire from incendiary bombs, the floor in question being directly under the roof; various items of inflammable material were eliminated.

In the storage rooms for alcoholic specimens on the ground floor lattice screens were placed around the shelves so as to prevent jars containing specimens preserved in alcohol from being shaken from the shelves by vibration. At the same time these screens were so arranged as to allow access to the specimens when needed for study.

For the past year attention had been given to the designation of categories of specimens that were to be evacuated in case of entry into the war or should air raids come to Washington. The selected materials include vast numbers of type specimens from the natural-history and paleontological collections, selected sets of materials from the anthropological and engineering and industries collections, and important specimens found in our historical series. The work of selecting and packing this material has occupied the staff for months, and part still remains to be accomplished. In some of the collections type series have been maintained separately for some time, while in others types were kept with other material so that it was necessary to segregate them, with many thousands of specimens concerned; the amount of this work has been considerable.

Type specimens preserved in alcohol, which offer some difficulties in handling, were evacuated together with selections of insects. Other type material will go to a warehouse in another location.

To another place of safety there was removed a selection of rare books from our libraries, manuscript materials, and important records. Negatives on nitrate film also have been segregated and will be removed to a place of safety.

All this has entailed a tremendous amount of extra labor on the part of the staff, which has been given most freely and willingly.

VISITORS

Curtailment of travel because of the war had less effect than anticipated upon the number of visitors at the various Museum buildings. The total recorded during the year was 2,042,817, against

2,505,817 for the previous year. The largest attendance was during August 1941, with 381,952 visitors, and the second largest was during July 1941, with 329,927. Table 1 shows the number of visitors during each month of the year.

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1942*

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building [1]	
1941					
July	65, 106	178, 241	86, 580	----	329, 927
August	73, 161	204, 269	104, 522	----	381, 952
September	44, 225	108, 120	69, 851	----	222, 196
October	29, 030	76, 214	50, 088	----	155, 332
November	25, 051	60, 282	46, 808	14, 728	146, 869
December	14, 442	31, 408	27, 743	9, 359	82, 952
1942					
January	15, 662	31, 597	29, 223	10, 010	86, 492
February	16, 570	34, 081	31, 381	11, 153	93, 185
March	18, 593	41, 351	38, 443	13, 220	111, 607
April	27, 727	65, 055	51, 526	18, 718	163, 026
May	22, 860	58, 583	45, 753	16, 059	143, 255
June	23, 203	47, 424	41, 071	14, 326	126, 024
Total	375, 630	[2] 936, 625	622, 989	107, 573	2, 042, 817

[1] Closed to visitors from July 1 to Nov. 6, 1941, for repairs.
[2] Not including 4,281 persons attending meetings after 4:30 p. m.

LIBRARY

Most gratifying to the Museum Library is the contribution it has been privileged to make to the war effort. Developed primarily as a working library for the curators and others engaged in the study of the physical characteristics, natural products, and peoples of all parts of the world, and of their arts and industries, the Library contains a large quantity of material of both direct and incidental interest to the armed services and defense agencies, and much use has been made of it. Perhaps more important still, and reversing the usual routine of providing the curators with printed information on their special subjects, the Library has been able materially to assist the representatives of the several war agencies by referring them to the curators who have contributed much valuable unpublished information.

The war has left few if any of the Library's activities untouched. As part of the Museum's comprehensive plan for the protection of all its cultural materials, the safeguarding of its collections against possible air raids had been given serious attention before the actual entry of the United States into the war. Later, certain irreplaceable books

and manuscripts were selected and prepared for removal to a place of greater safety.

With the cessation of shipments from enemy and occupied countries, accessions of books, periodicals, and pamphlets from abroad dropped sharply, but the flow of incoming material from allied and neutral countries, while diminished in volume, has in most cases been gratifyingly regular. Domestic accessions by purchase and exchange were much as usual.

A large and important gift of the year was the library on Copepoda numbering some 2,000 items, collected by the late Dr. Charles Branch Wilson and presented to the sectional library of marine invertebrates by his son, Carroll A. Wilson. A card index for use with the collection accompanied it, and its cataloging for the main library records has been begun. As in former years, members of the staff of the Institution and other friends made generous contributions of books and pamphlets.

The lack of subject cataloging of the older material in the Library and the absence of any catalog entries for many of the serial publications have long been handicaps to the service of the Library in identifying references and supplying promptly required publications or information. With the decrease in the number of foreign accessions needing attention, it has been possible for the catalogers to devote part of their time to the systematic recataloging of some of the important older sets. The publications of the early geological and geographical surveys of the western territories, one of our most used, most complicated, and least well cataloged series, were selected as a beginning, and 339 of these volumes and pamphlets were reclassified and fully cataloged by authors and subjects. As time and other duties permit, this much-needed work will be continued.

In addition to the services given to the war agencies, the usual reference work in the Library continued to be heavy. This is one of the intangibles difficult to measure statistically, and no numerical count of it is attempted. The use of books within the Library itself is large, and services to readers in finding information, identifying references, and verifying citations are many and varied. Questions are answered, too, by telephone, and considerable time is spent in preparing data for reply to letters and in the making of short bibliographies.

No inconsiderable part of the work of the loan desk is the arranging of interlibrary loans. Cooperation among the departmental libraries of Washington in borrowing and lending publications needed by their various clienteles is close, and research libraries elsewhere in the country are cordial in interlibrary loan relationships. Largely because of the calls from the war agencies, the number of

our loans to other libraries, 454 in all, showed an increase of 218 over those of the preceding year.

Some small relief was given to the serious overcrowding in the Natural History Building by the addition of 12 small cases placed at the ends of alcoves in the stack-room. To make the best possible use of every available foot of shelf-room, extensive shifting and rearrangement of certain classes of material is in progress, and some of it will probably have to be transferred to the Arts and Industries Building.

The summarized statistical record of the Library's growth and activities during the year is as follows:

Accessions (volumes and pamphlets), cataloged	2,417
Volumes added by binding periodicals	1,110
Periodicals entered	5,915
Volumes and pamphlets recataloged	468
Cards added to catalogs and shelf-lists	11,725
New exchanges arranged	127
Circulating of books and periodicals	9,489

Exclusive of incomplete volumes of periodicals and of uncataloged reprints and separates, the Museum Library now numbers 223,287 volumes and pamphlets.

PUBLICATIONS AND PRINTING

For the publication requirements of the National Museum during the fiscal year 1941–42, a total of $43,000 was allotted, an increase of $12,750 over the previous year. Of this allotment, $5,000 was reserved for binding, and $3,250 was used for the salary of the Museum printer (assigned to the National Museum from the Government Printing Office), leaving a balance of $34,750 for the printing of Museum Bulletins, the Proceedings, and the Annual Report. Forty-four publications were issued—the Annual Report, 6 Bulletins, 1 Contribution from the United States National Herbarium, and 36 Proceedings papers. These are listed hereinafter. Volumes bound totaled 1,303.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 74,541 copies, while in addition 8,004 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

The Museum editor, Paul H. Oehser, continued during the year as editor-in-chief of the Proceedings of the Eighth American Scientific Congress, working in collaboration with the Division of International Conferences of the Department of State. These Proceedings, as projected, will appear in 12 volumes; at the close of the year two had been published, the others being in various stages of printing. The editor

served also as chairman of the Efficiency Rating Committee of the Smithsonian Institution and devoted considerable time to the organization and completion of the efficiency-rating requirements of the year.

Indexing.—As time permitted, work was continued on the comprehensive index to Museum publications begun a few years ago. The Bulletins and Proceedings are now indexed up to 1900, and a start was made on the Reports. Considerable assistance was given in the indexing work by Miss Gladys Visel, editorial clerk, and Mrs. Marguerite W. Poole, information clerk. Indexes for Proceedings volume 90 and for Bulletin 179 (Bent) were also made in the editorial office.

Museum print shop.—The Museum print shop, a branch of the United States Government Printing Office, was operated by F. W. Bright, who, as in former years, was detailed from the Printing Office to print museum and herbarium labels and special forms. Much of the work produced in the shop consists of a large amount of composition and short press runs, and this type of printing can be done here more economically and promptly than at the Government Printing Office. The 107 requisitions for labels and other printing that were completed during the year bring the work of the shop nearly up to date, with the exception of a number of requisitions covering exhibition labels that involve much hand setting of type, and specimen labels for the division of insects and the National Herbarium.

PHOTOGRAPHIC LABORATORY

The usual cooperative arrangement between the photographic laboratory and the Bureau of American Ethnology, the National Collection of Fine Arts, and the National Museum has continued, although the volume of work has been somewhat curtailed. The members of the scientific staff have devoted so much of their time to packing important collections for transmittal to areas of safety that they have made less than usual demands upon the laboratory for illustrative material. The laboratory has made 2,342 negatives (including 4 photomicrographs), 11,272 prints, 361 lantern slides (including 36 kodachrome slides), 700 enlargements, and 10 transparencies. It has also developed 25 rolls of film, 21 film packs, and 3 cut films, and mounted 98 prints. Notwithstanding the reduction in the volume of work, laboratory space is becoming more and more crowded because of the encroachment of negative files and increased equipment.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—The usual routine repairs to buildings and installations were made during the year, but with the exception of the elevators, work on which was started last year, alterations were con-

centrated on laboratory and storage rooms necessary for the efficient operation of a large research establishment.

The two new passenger elevators in the rotunda of the Natural History Building, which were nearly finished at the end of the previous year, were completed and put into service early in July. Passenger traffic was handled by these elevators during the construction of the two in the north pavilion, which were completed in December. The fifth new elevator, located in the north stair-hall of the Smithsonian Building, was put into service in September, and work on the sixth and last was started immediately after the completion of the one in the north stair-hall. In January 1942 the passenger elevator program was concluded.

Provision of additional laboratory space for the Division of Radiation and Organisms necessitated the removal of the pipe shop from the large room at the west end of the west basement of the Smithsonian Building, and the work of preparing this room for use as a laboratory was started. The large room in the basement of the Natural History Building that had previously been used as a coal storage vault was reconditioned, and in March the new pipe shop was completed and the equipment was moved to the new quarters. Space was allotted in the west basement of the Smithsonian Building for a small emergency pipe shop to serve the buildings on the south side of the park.

The space formerly occupied by the four boilers in the Natural History Building was converted into two heating and lighting storage rooms, a lumber storage room, and an awning shop. While these rooms were not complete on June 30, they were capable of caring for a limited amount of equipment.

When the grades of the old Smithsonian Park were lowered during the construction of the new roads in the Mall, sections of the old water main running from Independence Avenue to Constitution Avenue were exposed, revealing a condition of corrosion and wear that caused apprehension as to the safety of the equally old pipes under the Arts and Industries Building, particularly as the four fire hydrants located near the Natural History Building, the Smithsonian Building, and the Arts and Industries Building are served by these pipes. In 1940 the District of Columbia Water Division was asked to submit an estimate for installing valves south and north of the Arts and Industries Building and running new pipes from the south valve to the valve outside the northeast pavilion, thus making it possible to abandon the old pipe. The estimate furnished exceeded the amount of money available at that time, but in 1942 a sufficient balance from the allotment for Building Repairs was on hand to authorize the work. On June 28 the water was drained from the old pipe and the two open

ends were sealed, and a menace was removed from the building and collections.

A similar menace to the Smithsonian Building was removed when the old, imperfect valve on the water main from Independence Avenue, located under the floor of the Aircraft Building, was closed and a new one was installed outside that building. The new valve will be much more accessible than the old one in an emergency.

Alterations and repairs on the Aircraft Building, consisting principally of repairing and repainting the roof, walls, and woodwork and the construction of two storage rooms, begun last year, were completed, and the building was reopened to the public in November.

Heat, light, and power.—The electric current used during the year amounted to 1,429,000 kilowatt-hours.

The Government's Central Heating Plant furnished the steam for heating the buildings, as for several years past. The amount of steam used was 54,584,000 pounds, about 11,000,000 pounds less than were used last year.

The four boilers mentioned in last year's report as having been disposed of through the Procurement Division were removed from the Natural History Building by the contractor, as were also four stokers, the removal being completed on September 16. On August 1 the work of removal of a blower and a small boiler was concluded.

Ice production.—The refrigerating machine for manufacturing ice for the Museum buildings produced 276 tons of ice during the year, at a cost of $2.01 a ton. On January 22 the ice machine at the Astrophysical Observatory was discontinued and the ammonia was removed as a safety measure, in the event of air raids. At the end of the fiscal year this machine was still inoperative.

Fire protection.—All the soda-and-acid fire extinguishers were periodically tested and inspected. The fire hose and standpipe hose were inspected and necessary repairs made.

Furniture and fixtures.—The furniture added during the year included 5 exhibition cases; 685 pieces of storage, laboratory, and office furniture; and 800 drawers. Equipment condemned and disposed of included 44 exhibition cases and bases; 128 pieces of storage, laboratory, office, and other furniture. An inventory of furniture on hand on June 30, 1941, showed 3,583 exhibition cases; 20,132 pieces of storage, laboratory, and office furniture; and 113,711 drawers, boxes, and frames of various kinds.

MEETINGS AND SPECIAL EXHIBITS

The auditorium and lecture room of the Natural History Building are made available regularly for meetings of educational, scientific, and governmental organizations and groups, and whenever possible

the Museum assists in carrying out their programs. During the past year 149 such meetings were held, including such events as the Eleventh Arthur Lecture of the Smithsonian Institution, delivered on the evening of February 26, 1942, by Dr. John A. Fleming, of the Carnegie Institution of Washington, on the subject "The Sun and the Earth's Magnetic Field."

In addition, the foyer and adjacent space of the Natural History Building were used almost continuously during the year for a series of 15 special exhibits shown under the auspices of various scientific and educational groups, as follows:

August 1 to 31, 1941: Exhibition of Currier and Ives prints.
September 1 to 15, 1941: Exhibit entitled "Federal Housing in America," by the Federal Works Agency.
September 18 to 22, 1941: Ninth Annual Rose Show, sponsored by the Potomac Rose Society.
October 1 to 31, 1941: Exhibit of early American crafts and arts, entitled "Americana, 1760–1815."
November 1 to 30, 1941: Exhibition of art work from the public schools of the District of Columbia.
December 5 to 31, 1941: Exhibition of oil paintings and water colors by Roy Martell Mason, of Stafford, N. Y.
December 18, 1941 to January 2, 1942: Exhibition of ship models, conducted by the Washington Ship Model Society.
January 1 to 31, 1942: Exhibition of paintings and engravings by Antonio Rodríguez Luna, of Mexico.
February 1 to 28, 1942: Exhibition of paintings on metal by Mrs. Buell Mullen, of Lake Forest, Ill.
March 1 to 31, 1942: Photographic exhibit, sponsored by the Arlington Camera Club.
April 5 to 28, 1942: Exhibition of paintings by members of the Landscape Club.
May 1 to 31, 1942: Exhibition of British air pictures.
May 12 to 31, 1942: Exhibition of sculpture by Mariana del Prado, of Bolivia.
June 1 to 28, 1942: Exhibition of paintings by Ignacio Aguirre, of Mexico.
June 1 to 25, 1942: Exhibit of British war posters.

CHANGES IN ORGANIZATION AND STAFF

In the department of anthropology, Dr. T. Dale Stewart succeeded to the curatorship of the division of physical anthropology on April 1, 1942, through the retirement of Dr. Aleš Hrdlička, and Dr. Marshall T. Newman was appointed associate curator on June 22, 1942. On March 1, 1942, Dr. Waldo R. Wedel and Dr. J. E. Weckler, Jr., were advanced to associate curatorships in archeology and ethnology, respectively.

In the department of biology, division of birds, Herbert G. Deignan was advanced to associate curator on February 1, 1942, and S. Dillon Ripley, 2d, was appointed assistant curator on March 13, 1942. In the division of mammals, Dr. David H. Johnson was appointed asso-

ciate curator on August 18, 1941. In other divisions the following were advanced to associate curators on March 1, 1942: Dr. Doris M. Cochran (reptiles and amphibians), Dr. Richard E. Blackwelder (insects), Clarence R. Shoemaker (marine invertebrates), and Dr. H. A. Rehder (mollusks). On February 1, 1942, Dr. Egbert H. Walker was reallocated to assistant curator, division of plants.

In the department of geology, the division of physical and chemical geology (systematic and applied) and the division of mineralogy and petrology were combined under the title of division of mineralogy and petrology, with Dr. W. F. Foshag as curator and E. P. Henderson as associate curator. B. O. Reberholt was advanced to senior scientific aide. The division of stratigraphic paleontology was changed to the division of invertebrate paleontology and paleobotany, with Dr. Charles E. Resser as curator and Dr. G. Arthur Cooper as associate curator. These changes were effective on June 17, 1942. Dr. C. Lewis Gazin was advanced to associate curator of vertebrate paleontology on March 1, 1942.

In the department of engineering and industries, the following were advanced to associate curators on March 1, 1942: Paul E. Garber (engineering), William N. Watkins (crafts and industries), and Dr. A. J. Olmsted (graphic arts).

Mrs. Leila F. Clark was appointed librarian of the Smithsonian Institution on February 1, 1942, in the position made vacant through the retirement of William L. Corbin, and Elisabeth P. Hobbs was advanced to associate librarian on May 21, 1942.

Honorary appointments were conferred on W. W. Taylor, Jr., as collaborator in the department of anthropology, July 1, 1941; on Dr. Aleš Hrdlička, as associate in anthropology, April 1, 1942; and on Dr. Henri Pittier, as associate in botany, September 25, 1941.

The following employees were furloughed indefinitely for military service: Clyde E. Bauman, January 22, 1942; Stephen C. Stuntz, March 9, 1942; Shallie Youngblood, May 20, 1942; and Earl W. Cook, May 24, 1942.

Employees who left the service through the operation of the retirement act, were as follows: For age, Dr. Aleš Hrdlička, curator, on March 31, 1942, with 38 years 11 months of service; Joseph P. Germuiller, guard, on December 8, 1941, with 23 years 3 months of service. For optional retirement, Fred Kaske, scientific aide, with 39 years 11 months of service, on May 31, 1942, and Samuel P. Darby, guard, with 33 years 7 months of service, on May 31, 1942. For disability, William H. Smith, lieutenant of guard, on December 31, 1941; Robert G. Tegeler, guard, on October 1, 1941; Thomas J. Shannon, guard, on November 14, 1941; and Arthur O. Wickert, under mechanic (electrician's helper), on January 31, 1942.

The honorary appointments of W. L. McAtee, acting custodian, section of Hemiptera, and of W. W. Taylor, Jr., collaborator in anthropology, terminated on June 30, 1942.

The Museum lost through death three active workers, namely Joseph Harvey Riley, associate curator, division of birds, on December 17, 1941; William H. Bray, preparator, department of anthropology, on December 18, 1941; Jacob Calvin Earnhart, guard, on February 10, 1942; and five honorary members of the staff who were long associated with its activities: Charles Branch Wilson, honorary collaborator in Copepoda, division of marine invertebrates, on August 18, 1941; Hugh McCormick Smith, associate in zoology, on September 28, 1941; Casey Albert Wood, collaborator, division of birds, on January 26, 1942; Clinton Hart Merriam, associate in zoology, on March 19, 1942; and William Schaus, honorary assistant curator of insects, on June 20, 1942.

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Head Curator*)

ACTIVITIES within the department of anthropology for the year can be divided into two equal parts. From July to December 1941, the plans contemplated in the last annual report, such as the classification of specimens, modernization of exhibition halls, and the rearrangement of study collections, progressed on schedule. After December 7, 1941, this program was suspended, and the remaining half of the fiscal year was devoted to the selection and packing of irreplaceable anthropological specimens to be stored in a modern fireproof repository at an inland locality. Valuable specimens were removed from the fourth floor in order to protect them and at the same time enable our air-raid defense organization better to control any fire that might be caused by incendiary bombs. These emergency programs could not have been accomplished without the wholehearted cooperation of the entire staff. The segregation of these specimens has naturally disarranged the order of some of our study collections. Even though many specimens were removed from exhibition and some sections of our exhibition halls rearranged, new exhibits have been installed and others rebuilt in such a manner that our halls were at no time closed to the public.

The staff has also cooperated by volunteering to serve as members of the Smithsonian air raid defense, all of which symbolizes their intention to preserve as far as is humanly possible the collections now under their jurisdiction.

For the first half of the fiscal year correspondence requesting anthropological information, as well as the number of visitors bringing specimens to the department for identification, was comparable to the same period in 1940. Since the beginning of 1942 these requests have been supplemented by others from many branches of our armed forces seeking data. Every effort is now being made to serve the United Nations with the specialized knowledge at our disposal, both through specimens and the experiences of our staff.

During the latter part of May and the first half of June, Frank M. Setzler was detailed to the National Park Service to direct an archeological reconnaissance within the Dinosaur National Monument along the Yampa and Green Rivers in northwestern Colorado and eastern Utah.

After serving the Institution for a period of 38 years and 11 months, Dr. Aleš Hrdlička retired as curator of the division of physical anthropology on March 31, 1942. During this time, and largely due to his personal effort, the division accumulated approximately 37,000 specimens, a collection of human skeletal material that ranks among the finest in the world and is especially outstanding in its series of Eskimo and Aleut materials from Alaska. In recognition of his monumental work Dr. Hrdlička on April 1, 1942, was appointed associate in anthropology, and he will continue to use his usual office, surrounded by the many hundreds of scientific publications that he has assembled and that he has now presented to the division of physical anthropology.

ACCESSIONS

New accessions received during the year totaled 91 (3,000 specimens, a decrease of 1,064 as compared to the previous year). Several collections that had been accessioned in other years were classified and cataloged. The 91 new accessions were assigned to the following divisions and sections within the department: Archeology, 15 (2,011 specimens); ethnology, 42 (519 specimens); ceramics, 10 (175 specimens); musical instruments, 3 (7 specimens); period art and textiles, 10 (277 specimens); physical anthropology, 11 (11 specimens).

Archeology.—The following collections received during the year and assigned to the division of archeology are regarded as the most valuable; 68 Greek, Roman, and Egyptian specimens collected by Thomas Nelson Page (1853–1922) were presented by Mrs. Rosewell Page; 18 examples of ancient Persian pottery and armor, together with a Peruvian vessel, came as a gift from Joseph H. Himes; 707 artifacts excavated from shell and sand mounds in Hillsborough, Dade, and Broward Counties, Fla., were transferred to the national collections by the Work Projects Administration; 220 stone, bone, pottery, and shell specimens collected for the Museum by Dr. T. Dale Stewart from the old Indian village site of Patawomeke, Stafford County, Va.; 179 artifacts from various sites in southern California transferred to the Museum by the Bureau of American Ethnology.

Ethnology.—Numerous noteworthy specimens were received in this division. Blankets woven with Bayeta yarn by the Navaho Indians in Arizona, necklaces of worked silver, turquoise and shell beads made by the Zuñi and Navaho Indians, were bequeathed to the Smithsonian Institution by Mrs. Mary Vaux Walcott and subsequently deposited in the Museum. Mrs. William H. Bell presented a large collection consisting of cotton molas (blouses) and woven bags collected among the Tule Indians along the San Blas coast of Panama, various wearing apparel from the Indians of Guatemala, and a palm fiber costume with a deer head mask from the Chocó Indians of Darién. An inter-

esting collection of cutting and slashing weapons made by the Moro of Mindanao, P. I., was presented to the national collections by Capt. E. T. Hoopes. A carved, lidded, wooden food bowl decorated with cut sections of *Tridacna* clam shells, obtained many years ago from the natives on the Island of Yap, was donated by Mrs. H. L. Pugh. A painted robe of dressed buffalo hide from the Comanche Indians was presented by Mrs. William Palmer. While a member of the Transit-of-Venus Expedition in 1882, Col. T. L. Casey was presented a carved wooden head-rest by a Zulu chief. This specimen was received as a gift from Mrs. Laura Welsh Casey. An unusual collection of Swedish wood carver's art, made in the sixteenth, seventeenth, and eighteenth centuries, was presented by Mrs. William Duncan McKim. Cult objects from voodoo shrines in the region of Croix des Bouquets, near Port-au-Prince, Haiti, selected by Dr. A. Métraux, were transferred to the Museum from the Bureau of American Ethnology.

The following collections assigned to the section of ceramics are worthy of note: In the bequest of Miss Katherine Noyes a glazed Parian pitcher made about 1850 at the Bennington Pottery in Vermont was given to the Museum. Miss Estelle J. Brereton presented a Bilston snuffbox on which is inscribed a calendar for the year 1759. Mrs. William Duncan McKim gave an interesting collection of eighteenth and nineteenth century European pottery, porcelain, and glassware. Examples of lacy, clear flint glass made at the Sandwich works in Massachusetts about 1840 came as a gift from Miss Margaret Stottlemeyer.

Among the various accessions assigned to the section of musical instruments the most noteworthy was a mandolin decorated with inlay of tortoise shell, mother-of-pearl, ebony, and ivory, which was handmade by Gene Trusiewicz in 1900, presented to the Museum by Robert H. Miller.

The most outstanding gifts in the section of period art and textiles were: 99 ancient Egyptian scarabs mounted as three necklaces and a bangle and chain of filigree gold, received from Miss Annie-May Hegeman, a donor of many rare objects to the collections; early American silver spoons made by Conrad Bard, of New York, presented by Mrs. Laura Welsh Casey; interesting examples of American silver made by Samuel Kirk, of Baltimore, donated by Mrs. William Duncan McKim; through a bequest by Mrs. Isabel H. Vickers, a collection of three unusual Oriental rugs. A large collection of European antique period furniture, ivories, silver, embroideries, tapestry, and art objects, formerly listed as a loan, was changed to a gift by the daughters of Mrs. Alice P. Barney.

Physical anthropology.—Two of the 11 accessions received in the division of physical anthropology are especially noteworthy: A male

Tlingit skeleton presented by Axel Rasmussen; and a skull and lower jaw from the W. W. Poland mound near Shedd, Oreg., received from Willamette University Museum.

INSTALLATION AND PRESERVATION OF COLLECTIONS

During October 1941 the division of ethnology participated with other divisions in the Museum in forming and installing an exhibition of early American arts and crafts, dating from 1750 to 1850, in the foyer of the Natural History Building. Most of the articles exhibited were selected from the study collections of the department of engineering and industries, division of history, division of ethnology, and the National Collection of Fine Arts.

From July to December all the divisions within the department devoted considerable time to the rearrangement and preservation of the vast study collections. The various metal storage cases containing perishable specimens were vacuum cleaned and poisoned to prevent any infestation by destructive beetles. The storage cases in ethnology attic were rearranged in order to conserve as much space as possible for our ever growing collections. A master chart was then prepared to facilitate the use of this large collection of study material. The cases in the third-floor corridors and offices were also rearranged. All cases were then renumbered and the specimens grouped, where possible, according to tribes and geographical locations.

Miniature scale models were prepared under the supervision of the staff to assist in the building of a new type of exhibition which had been approved for installation in hall 11. Except for the constant care required of our limited staff to preserve our fragile and perishable specimens, all the above work ceased after December 7 in order to safeguard the collections from the potential danger of aerial warfare.

As a result of the emergency program, which became effective after December 1941, many of the cases on the fourth floor containing the study collections were removed to the third floor, where they can be given better protection from incendiary bombs and where they lessen our fire hazard. Thousands of irreplaceable anthropological specimens were packed and stored awaiting shipment outside of Washington. Such an emergency program necessarily disrupted the normal routine and required many adjustments in connection with exhibition floors. After the specimens were selected from the exhibition cases and the exhibition floors rearranged to accommodate storage units from the fourth floor, new exhibits were installed. All these changes were accomplished without closing the exhibition halls for a single day to the visiting public.

During this same period, from January to June 1942, the staff was trained to participate in the Smithsonian air-raid defense organization in order to protect the collections during an emergency.

Archeology.—Reduction in the exhibition space devoted to American archeology as well as the removal of specimens from exhibition required the installation of 7 partially new and 22 completely new exhibits.

The crowded condition in the offices and the laboratories prevents the division from effectively preparing the large accumulation of archeological specimens assigned to it. Lack of table space now necessitates numerous makeshifts in order properly to revise the exhibits and the State collections. Nevertheless, all the C. W. A.-Smithsonian Institution archeological collections have been classified and cataloged. Moth and beetle repellents have been periodically added to those cases containing artifacts subject to injury by such insects. All relatively small accessions received during the year were cleaned, classified, and cataloged. The material selected for evacuation was packed in 50 boxes and 3 quarter-unit storage cases.

Ethnology.—The plan for building modern ethnological groups in hall 11 has been deferred. Considerable research, however, was carried on for these groups from July to December 1941. The rearrangement of storage units and renumbering the cases on the third and fourth floors were completed before December. Even though more than one-half of these cases were transferred to the second floor, they can be returned to their proper places without much trouble. H. W. Krieger, curator of ethnology, played an important part in preparing the exhibition of American arts and crafts on display in the foyer during October.

The synoptic exhibits in ethnology were revised to show the handicrafts, weapons, and implements of American Indian tribes. New material placed on exhibition includes European and Asiatic musical instruments donated by Miss Mary E. Maxwell, examples of Negro wood carvings from West Africa, Navaho weavings, North American Indian games, ethnology of the people of India, and three wall-case displays showing examples of early Swedish wood carving, early American silver, and Josiah Wedgwood cameos.

In all, 3,431 irreplaceable specimens from this division were segregated and packed in 15 quarter-unit cases and 39 boxes. All current accessions and those from previous years have been classified and cataloged.

Physical anthropology.—Because of several personnel changes within the division of physical anthropology, no revisions were made in the exhibitions. The large collection of brains preserved in alco-

holic solutions was removed from the third floor because they constituted an extreme fire hazard. Two large collections remained uncataloged at the end of the fiscal year.

The system of catalog cards is now being revised. Instead of a tribal and geographical arrangement, the cards are being retyped and arranged in numerical order, with a new tribal and geographical index. This arrangement is comparable to the systems used in the other divisions of the department. At the close of the fiscal year the most valuable series of skulls and long bones were being packed for evacuation.

Anthropological laboratory.—Andreas J. Andrews, chief preparator, modeled a number of busts of Teton Sioux Indians, restored several lamps and bowls, and assisted in the restoration of seven skulls and four skeletons for the division of physical anthropology. Seventeen prehistoric Indian pottery jars were restored; casts were made and painted of bannerstones, Grave Creek tablet, and wooden tablet from Easter Island; restorations and repairs were made on copper objects from Mexico, the model of Stonehenge, and other models for the division of archeology. Seventy-eight pieces of silver, copper, and brass were cleaned and polished; several wooden statues were treated and restored, slate carvings and stone pipes were restored, and 28 pieces of Indian pottery vessels were restored for the division of ethnology.

A figure for the period costume exhibit was modeled and partially cast for the division of history, and several sculptures were repaired for the National Collection of Fine Arts. All the molds in the laboratory were carefully checked and rearranged, and the card records were retyped to provide a more efficient record for locating the molds when necessary.

INVESTIGATION AND RESEARCH

In addition to completing several manuscripts for publication, considerable research was required of the staff in the department of anthropology in answering requests of correspondents and in identifying specimens submitted to the Museum by visitors, Government agencies, and other museums. Our program for modernizing exhibits required some detailed investigations.

In September the head curator attended a conference at Lexington, Ky., dealing with various phases of archeological research in the Mississippi Valley. As a member of the Advisory Board of the National Park Service he investigated the historical-archeological field work in and around Plymouth, Mass., and inspected the museum specimens and various houses that had been built and occupied by the Pilgrims within the area. He attended the two meetings of the Advisory Board held in Washington. As retiring president of the Anthropological Society

of Washington he prepared a paper reviewing archeological accomplishments in the United States during the past 12 years. He continued as a consultant for the Federal Work Projects Administration on archeological projects sponsored by this agency throughout the country. On April 3, 1942, he was appointed group warden of the Smithsonian air-raid defense.

During the year the department received 1,218 requests for information on subjects pertaining to its field. Some of them involved identification of specimens, while others required considerable research to supply the specific information desired. In addition to specimens in archeology and ethnology, many correspondents asked for data on such subjects as old china, silver, and musical instruments.

Archeology.—The curator of archeology, Neil M. Judd, continued his study of the material culture of ancient Pueblo Bonito, N. Mex., and reexamined the Greek, Roman, and Egyptian collections in connection with the preparation of new exhibits and revised labels. Associate Curator Waldo R. Wedel completed two manuscripts: "Archeological Investigations in Platte and Clay Counties, Missouri" and "Archeological Remains in Central Kansas and Their Possible Bearing on the Location of Quivira"; and made progress with other researches in Missouri Valley archeology.

Walter W. Taylor, Jr., on September 29, 1941, began study of the cave material that he collected for the Museum in Coahuila, Mexico.

Bird bones from Buena Vista shell heaps, California, sent for identification to Dr. Alden H. Miller, University of California, Berkeley, were reported on by Miss Ida DeMay.

During the fiscal year 33 lots of archeological material were received through the mail for examination and report and subsequently returned to the senders.

Ethnology.—The curator of ethnology, H. W. Krieger, as time permitted, continued analysis of the Antillean and Northwest Pacific Coast field collections made by him in previous years. He also worked on the preparation of a paper on peoples of the Philippines, to be published by the Smithsonian Institution in its War Background Studies. The associate curator, Dr. J. E. Weckler, Jr., conducted preliminary research on problems of South American ethnology and geography in pursuance of plans for the modernization of the displays of South American ethnology. Dr. Weckler is likewise engaged in the preparation of a paper on Polynesians: The Explorers of the Pacific. He is also completing a monographic study on ritual status in Polynesia.

Assistance by the division in the research work of outside individuals and institutions covered various phases of ethnology, ceramics, musical instruments, period art and textiles, and heating and lighting, as well as questions pertaining to the Bible and com-

parative religions. At the request of the director of the Charleston Museum the National Museum's entire collection of silver ornaments worn by Indians of the Eastern States was examined in a search for hallmarks. All the Crow Indian shields in the National Museum were examined at the request of the Milwaukee Public Museum and photographs furnished together with detailed descriptions and color notes.

Routine services extended to other governmental departments were concerned with the identification and appraisal of specimens primarily for the Post Office, Customs, National Park Service, and Agriculture and Justice Departments. Dissemination of information to the Army, Navy, and other war agencies played a minor but definite part in the division's activities. A good example of the use of ethnographic collections is illustrated in the War Production Board's request for examples of an umbrella with frame and staves of bamboo in order to conserve the high-grade steel ordinarily used in the manufacture of parasols and umbrellas. Numerous examples of the substitute use of bamboo were located in the collections. Native examples of the use of *Castilla* and *Hevea* rubber brought from the upper Amazon by Lieutenants Herndon and Gibbon in 1851 were also studied for another project. Employees from the Quartermaster Corps of the Army spent two days examining the collections of tailored skin garments worn by the Eskimo of Alaska, Canada, and Greenland. Research involving considerable time was made in answer to questions advanced by the staff of the National Geographic Society relative to strategic areas and peoples. Since December 1941 the associate curator has supplied information to various war agencies and the Smithsonian War Committee.

Forty-nine written reports were made pertaining to the examination and identification of individual specimens and collections, totaling 97 specimens. This total included 38 ethnological objects, mostly American Indian and Asiatic, but some Polynesian; 29 European, American, and Asiatic ceramic objects; 28 items under period art and textiles, mostly silver utensils and objects of personal adornment; and two examples of musical instruments.

Physical anthropology.—Dr. Aleš Hrdlička made additional studies on fetal, juvenile, and adult Alaskan skeletal material. He also measured a large series of adult white American skulls at Western Reserve Medical School. His remaining time was devoted chiefly to archeological and anthropological matters pertaining to the Aleutian Islands. At the close of the year Dr. Hrdlička was busily engaged on a revision of his "Races of Russia" for the War Background Studies of the Smithsonian Institution. Dr. T. Dale Stewart prepared for publication the data obtained on skeletal material during his visit to

Perú early in 1941, as well as a paper on the nomenclature of the head height indices. He also studied variations in anthropometric techniques.

Information has been given repeatedly to the War and Navy intelligence services, to the Coordinator of Information, and to other Government agencies. The following identifications have been made in suspected criminal cases: For the Federal Bureau of Investigation, identification at different times of six lots of bones; for the Bureau of Criminal Investigation, New York State Police, identification of a skeleton; for the Delaware State Police, identification of a skull; for United States Consul Derry of Perth, Australia, identification of bones.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The division of archeology distributed 135 specimens and casts of specimens as gifts to 13 museums, and one specimen from Turks Island was sent out in exchange. The division of ethnology sent as gifts to other museums, schools, and other research agencies 259 specimens and 127 photographs of ethnological objects, 8 specimens were exchanged, 318 were withdrawn from loan collections by the owners, 160 specimens were lent to other institutions and Government agencies for exhibition purposes and subsequently returned, while 41 specimens were transferred to the division of archeology and three to another Government agency. The division of physical anthropology lent three lower jaws for X-ray studies.

NUMBER OF SPECIMENS UNDER DEPARTMENT

On June 30, 1942, the department of anthropology is credited with a total of 708,636 specimens, representing a net increase of 2,224. This does not include a large number of specimens received during the year but not yet cataloged.

The following summary indicates the number of specimens assigned to the various divisions and sections within the department:

Archeology	477,758
Ethnology	182,121
Ceramics	7,378
Musical instruments	2,410
Period art and textiles	2,155
Physical anthropology	36,814
Total	708,636

DEPARTMENT OF BIOLOGY

(LEONHARD STEJNEGER, *Head Curator*)

THE decrease in number from previous years both of accessions and of individual biological specimens was considerably less than might have been expected in view of the aggravated condition of world affairs, and the scientific value of the additions to the collections was fully maintained.

Field work has been curtailed. Dr. Remington Kellogg, assisted by W. M. Perrygo, during the spring of 1942 was engaged in exploring Rampart Cave in Mohave County, Ariz., and in addition to the collections of bones and other animal remains from the cave brought back to the Museum mammals, birds, reptiles, fishes, insects, and plants illustrating the biota of the adjacent region. M. A. Carriker, Jr., continued work in the field in northeastern Colombia. Dr. L. P. Schultz, in connection with the Department of State's program of cultural relations with South American Republics, spent about four months in Venezuela, studying the ichthyological fauna of the Maracaibo Basin, and made a large and important collection of the fishes. Dr. E. A. Chapin under the same auspices spent nearly two months in Colombia, where he worked in collaboration with entomologists of the Colombian Government service. His opportunity for field work was limited, but he made a collection of coccinellid beetles and arranged for reciprocal exchanges. Botanical field work under this same program was conducted in Cuba by C. V. Morton. Dr. E. H. Walker collected plants in North Carolina and South Carolina. Studies of the local biota of the adjacent regions of Maryland and Virginia by the members of the curatorial staff were pursued as opportunity offered. Austin H. Clark continued his survey of the butterflies of Virginia, paying special attention to the northern part of the Shenandoah Valley. Considerable collecting was done at nearby points by various specialists of the entomological taxonomic staff of the Department of Agriculture; in addition, H. G. Barber collected approximately 700 Hemiptera while on vacation in the Adirondacks, and L. L. Buchanan more than 1,000 weevils as the result of an official trip to the Gulf States.

The prime effort of the workers of the biological department during the year was dedicated to the problem of safeguarding its priceless scientific material, particularly the irreplaceable type specimens of animals and plants, against possible destruction by airplane raids.

In those divisions where special type collections had not already been established, the segregation of the types from the general systematic collection was vigorously prosecuted. Through the intelligent and unremitting work of all staff members this enormous task has successfully gone forward.

As a special feature of the year's activities may be mentioned assistance rendered by members of the staff to various requests for information in connection with national defense problems. The department lost several of its most valued members of the staff by death: J. H. Riley, associate curator of birds, on December 17, 1941; Dr. Hugh M. Smith, associate curator in zoology, September 28, 1941; Dr. C. Hart Merriam, associate in zoology, March 19, 1942; Dr. C. B. Wilson, collaborator in copepod crustaceans, August 18, 1941; Dr. Casey A. Wood, collaborator in birds, January 26, 1942; and Dr. William Schaus, honorary assistant curator of insects, June 20, 1942.

ACCESSIONS

Accessions for the year aggregated 940 with a total of 245,200 specimens. Some of the more noteworthy accessions are listed under the various divisions as follows:

Mammals.—Thirty specimens of Antarctic seals (12 skins with skulls, 2 skeletons, and 16 fetuses) representing four genera and including three skins and two skeletons of the rare Ross's seal, collected during the United States Antarctic Service Expedition, were received as a transfer from the Department of the Interior. Other valuable accessions were 151 mammals from Mohave County, Ariz., collected by Dr. Remington Kellogg and W. M. Perrygo, and 54 Manchurian mammals, representing forms new to the Museum and one new to science, were obtained by purchase. Robert R. Holder donated a Tibetan fox skin (*Cynalopex corsac*) from the Province of Yunnan, China, a genus hitherto unrepresented in the Museum. The National Speleological Society presented 35 bats collected in nearby caves. The skeleton and cape of an Afrikander bull were presented by Robert J. Kleberg, Jr.

Birds.—The most important and valuable avian accessions include 1,845 skins, 7 skeletons, and 2 sets of eggs collected in Colombia by Dr. A. Wetmore and M. A. Carriker, Jr.; 272 bird skins from Veracruz, Mexico, donated by A. E. Colburn; 14 skins of Venezuelan birds, including 5 new to the collection, presented by W. H. Phelps; a specimen of the chestnut-breasted babbler from Chile, also new to the Museum, received as a gift from Dr. R. A. Philippi; and two skins from Manchuria obtained by purchase. From the Rockefeller Foundation came 447 birds from Brazil, collected by E. G. Holt. Orie O. Miller donated 23 birds from Paraguay, and the Colorado Museum of

Natural History, through A. M. Bailey, presented four ptarmigans in plumages new to the collection. The Fish and Wildlife Service transferred 53 birds from various parts of the world, 15 skins of Alaskan ptarmigan, and three sets of eggs of rare North American waterfowl. Other materials include 90 skeletons, 19 alcoholics, and 24 skins from the National Zoological Park; 63 bird skeletons collected in Arizona by Dr. Remington Kellogg and W. M. Perrygo; 9 bird skins from Manchuria from Lt. Col. L. R. Wolfe; four bird skins from Ecuador, including a genus, *Hapaloptila*, new to the Museum, obtained by purchase.

Reptiles and amphibians.—The lots of new material received during the year in this division consisted of comparatively few specimens each. M. B. Mittleman deposited the holotype of a new subspecies of salamander recently described by him.

Fishes.—One outstanding ichthyological accession was the transfer by the United States Fish and Wildlife Service of 14,219 specimens from the area between Peru and Alaska. President Franklin D. Roosevelt presented a fine specimen of *Macrozoarces americanus*, mother-of-eels, caught off Nova Scotia, August 9, 1941. E. F. Ricketts donated 107 specimens, including types of *Hypsoblenniops rickettsi*, from the Gulf of California. All the following accessions, obtained in exchange, contain valuable type material: From the Museum of Comparative Zoology, 166 specimens from Liberia and Cameroons, including holotypes and paratypes of new species; from the University of Michigan Museum of Zoology, 72 fishes, 29 of which are paratypes from Brazil, Yucatán, and Venezuela; Stanford University Natural History Museum, five specimens, of which one is a cotype of *Elanura forficata* from Bering Sea, one a paratype of *Sebastodes owstoni*, and one of *Nectarges nepenthe;* Academy of Natural Sciences of Philadelphia, one paratype of *Machaerenchelys vanderbilti* from Takaroa, South Pacific; Field Museum of Natural History, one paratype of *Spinoblennius spiniger* from the Galápagos.

Insects.—The collection of Hemiptera built up by Waldo L. McAtee, of the Fish and Wildlife Service, consisting of approximately 25,000 specimens and containing much type material, was presented by him to the Museum. Mr. McAtee also presented many volumes and papers from his private library to our library, including several very rare books, notably a copy of Panzer's "Faunae Insectorum Germaniae Initia" that is probably unique, as it appears to have been made up from page proof, the sheets being printed on one side only and mounted on larger, better paper for binding. The collection of the late George P. Engelhardt and his entomological books have also come to the division in addition to over 5,000 specimens of Lepidoptera presented by him during his life. The material

collected by the curator, Dr. Chapin, in Jamaica was accessioned during this year and amounted to about 7,600 specimens, mostly termites. About 2,000 specimens, largely beetles, have been accessioned from Colombia, including 1,200 collected by Dr. Chapin and 800 specimens from the Colombian Government. At the death of Alonzo C. Davis, the Museum received as a gift from Mrs. Davis about 1,600 specimens, mostly of the scarabaeid genus *Pleocoma* and Coccinellidae. A gift of approximately 1,600 specimens of Carabidae was received from E. D. Quirsfeld. A total of approximately 52,000 insect specimens were added to the Museum collections from material received through the United States Bureau of Entomology and Plant Quarantine, in connection with its activities. They include a large volume of miscellaneous insect material representing virtually all orders received from the Bureau's division of foreign plant quarantine. These are in addition to insects collected personally by members of the staff and to special accessions received in the division and separately reported to the curator of the division of insects of the Museum. Among the more important accessions from material submitted for identification are insects of almost all orders sent in by H. L. Parker and P. A. Berry from South America, and by James Zetek from Panama, large collections forwarded by C. H. Ballou from Venezuela, more limited but valuable material from the Lesser Antilles received from R. G. Fennah, and important series, especially in Thysanoptera, Coleoptera, and Hymenoptera, from Donald Spiller, of New Zealand.

Marine invertebrates.—The leading accessions for the year in this division are 21 in number, of which 17 include specimens new to our collections or type and other material published upon or for which completed manuscripts are now awaiting publication. The following are important items: Rendell Rhoades, four crayfish, representing types and allotypes of new species and subspecies from caves in Alabama; Steve A. Glassell, a collection of Crustacea, including the type of a new stomatopod and types, allotypes, and paratypes of two new crabs; Dr. William A. Hilton, a collection of pycnogonids, including 14 types and one paratype of a new species; Dr. Charles Branch Wilson (received through the administrator of his estate), a comprehensive library of books and pamphlets on copepods (approximately 2,500 books and pamphlets), a safe cabinet containing records of the species of copepods and the literature concerning them (thousands of reference cards), miscellaneous manuscript records, and a small collection of miscellaneous invertebrates; Horton H. Hobbs, Jr., collections of crayfishes, including types of four new species and one new subspecies; C. Clayton Hoff, a collection of ostracods, including types, cotypes, allotypes, and paratypes of 12 new species; Dr. William A. Kepner, types

of four new species of turbellarian worms; Frank J. Myers, 35 slides of rotifiers; Dr. Marcus C. Old, 15 slides of boring sponges, including types of three new species; Dr. M. W. de Laubenfels, a collection of sponges from the Puget Sound region, including types of two new species; Dr. H. H. Brown, Barbados, a collection of very fine sponges from the Bahamas; Mrs. E. D. Robson, Canal Zone, a large collection of well-preserved marine invertebrates; New York Zoological Society, through Dr. William Beebe, 30 crabs, representing paratypes and topotypes of 10 new species of *Uca;* Stanford University, a collection of sipunculid worms, including types of three new species; the U. S. Fish and Wildlife Service, 8 sipunculid worms, including types of three new species and paratype of one new species; Dr. Walter K. Fisher, 3 sipunculid worms, including type of new species; Dr. Dora Priaulx Henry, a collection of barnacles, including type of a new subspecies; and Dr. G. E. Gates, Judson College, Rangoon, Burma, types of two new species of earthworms.

Mollusks.—Among the most outstanding contributions in Mollusca may be mentioned the following: 49 mollusks collected through the W. L. Abbott fund by Dr. A. Wetmore and M. A. Carriker, Jr., in Colombia, including types of several new species; Miss Marie E. Bourgeois, Mixcoac, Mexico, 99 Mexican shells, including types of three new species; A. Sorensen, one *Haliotis* from Magdalena Bay, Baja California, type of *H. magdalenensis* Bartsch; Academy of Natural Sciences of Philadelphia, paratype of *Thysanophora balboa* from Costa Rica and three specimens of *Urocoptis miranda* Pilsbry (topotypes); Mrs. Ralph Bormann, four paratypes of *Epitonium tincta bormanni* Strong from Mission Beach, Calif.; Tom Burch, paratype of *Aligena redondoensis* Burch from off Redondo Beach, Calif.; Maxwell Smith, two topotypes of *Urocoptis maxwelli* Pilsbry from the Dominican Republic; two purchases made through the Frances Lea Chamberlain fund, consisting of 203 lots of 843 specimens; Museum of Comparative Zoology, four paratypes of mollusks, *Cerithidea pliculosa veracruzensis* Bequaert; Dr. Harry S. Ladd, 4,000 specimens of marine shells from Fiji, Australia, and New Zealand; Miss Gertrude Thornley, 290 specimens of mollusks, chiefly marine, from Australia; Prof. Manuel Valerio, San José, Costa Rica, 208 specimens of land and fresh-water shells from Costa Rica; E. F. Ricketts, 570 specimens from the Gulf of California; Neil D. Richmond, mollusks from Virginia, West Virginia, Montana, and Utah, representing 2,550 specimens; Dr. J. P. E. Morrison, approximately 31,000 specimens of land, fresh-water, and marine mollusks from Ohio, Pennsylvania, Maryland, and Virginia; William E. Salter, about 500 specimens from Colorado, New Mexico, and Oklahoma; Mrs. Elinor D. Robson, Balboa Heights, Canal Zone, 262 specimens of marine shells from the Bay of Panama;

Dr. V. D. Spicer, U. S. S. *Sirius*, about 2,390 specimens of Hawaiian mollusks.

Helminths.—Among the accessions made to the collection of helminths the following, listed alphabetically, contain type material: Miss Margarita Bravo H., Instituto de Biología, Chapultepec, Mexico, cotype of *Megalodiscus rankini;* Prof. Eduardo Caballero y C., Instituto de Biología, Chapultepec, Mexico, cotype of trematode, *Polystoma naevius;* Dr. José Candido M. Carvalho, type of *Pseudochordodes manteri* Carvalho; Prof. Jacob H. Fischthal, type specimen of *Phyllodistomum etheostomae;* Frans C. Goble, 6 specimens of nematodes, type of *Crenosoma zederi;* K. E. Herde, M. E. Brock, and S. J. Polk, 38 lots of cotypes of helminths; Dr. Maire Weir Kay, three types of helminths, including a new genotype; Dr. Harold W. Manter, 5 slides of type material of trematodes; Prof. John D. Mizelle, 18 slides of type material of helminths; Prof. Leo H. Petri, two type specimens of helminths; Prof. C. Courson Zeliff, two slides of trematodes, *Cyclocoelum dumetellae*, type and paratype.

Corals.—Six lots of corals have been accessioned, aggregating about 447 specimens, as follows: Dr. Hilary B. Moore, four corals from Bermuda; Furman Lloyd Mulford, three corals; Mrs. Elinor D. Robson, Canal Zone, 54 specimens; Dr. William Randolph Taylor, five specimens from Haiti; Mrs. R. W. Thompson, about 380 corals from Tutuila, Samoa; Woodbridge Williams, one coral (*Dendrophyllia oldroydi* Faustino).

Echinoderms.—The most interesting accession was a collection from Peru made by Milton J. Lobell and transmitted by the Fish and Wildlife Service, which included two holothurians (*Pentamera zacae* and *Thyonacta mexicana*) both described during the past year. Another collection from Peru made by H. C. and D. L. Frizzell included the first specimen of the brittle-star *Ophiocoma aethiops* known from that country. A collection from the coast of Texas presented by Harry S. Ladd included 48 specimens of *Astropecten articulatus valencienni* and 24 of *Mellita lata*, two little-known species.

Plants.—Among the more important accessions are 2,169 specimens received from the Instituto de Ciencias Naturales, Bogotá, Colombia, in continuation of exchanges. This excellent material was mainly collected by Dr. José Cuatrecasas and is to be reported upon in connection with the joint enterprise between the two institutions looking to the preparation of a descriptive flora of Colombia. Other collections to be specially noted are as follows: 6,006 specimens from Cuba, collected by C. V. Morton in the course of field work covering about two months; 2,256 specimens, mainly from the United States and tropical America, received from the Gray Herbarium of Harvard University in exchange; 2,090 specimens received in exchange from

the Field Museum of Natural History, including more than 700 Guatemalan ferns for identification and report; 833 specimens received from the University of California in exchange, about half of this material consisting of flowering plants from the western United States, the remainder of algae and of South American flowering plants; about 6,000 specimens from Virginia and West Virginia, presented by H. A. Allard; 1,143 Oklahoma specimens, presented by Phillips University in connection with a State survey; 693 specimens, mostly from Mexico received from Stanford University in exchange; 888 specimens from Argentina, received from the Instituto Miguel Lillo, Tucumán, in exchange; 452 specimens from Northwestern United States received from the State College of Washington, in exchange; 375 Mexican grasses, presented by José V. Santos; 413 specimens, mostly Cyperaceae, received from the Catholic University of America in exchange; 445 miscellaneous specimens received as an exchange from the Arnold Arboretum of Harvard University; 279 specimens from Panama presented by Paul H. Allen, Canal Zone; 800 specimens from the western United States, obtained by purchase; 270 South American specimens, received in exchange from Boris A. Krukoff; 250 specimens from Mexico, presented by H. B. Hinton; 234 grasses received from the University of Queensland as an exchange; 256 miscellaneous specimens received from the University of Michigan in exchange; 242 miscellaneous specimens received from the Missouri Botanical Garden in exchange; 207 specimens from Haiti presented by L. R. Holdridge; 711 specimens, mainly from Shenandoah National Park, presented by Dr. E. H. Walker.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Almost all the work of the department under this heading was dictated by the necessity of safeguarding the collections during present war conditions. Efforts naturally were concentrated on the safety of the absolutely priceless parts of the collections, viz, the tens of thousands of type specimens of animal and plant species, which no money and no work can replace if once they are destroyed. Type specimens are the foundation of the entire scientific nomenclature, and their destruction would be a scientific calamity of the first order. Our type collections embrace not only the originals of all the species described by the biologists of the Smithsonian Institution and the National Museum, but many zoologists and botanists from the whole country and even abroad have deposited their type material for safekeeping in the National Museum as the most likely place to insure its permanent preservation and accessibility to future generations of scientific investigators. The responsibility thus placed on the na-

tional institution has led to special care for such material by the curatorial staff.

Under the present war emergency arrangements have been made for special storage of this type material and some other unique specimens in places where there is little or no probability of damage in case of enemy raids. The methods for handling these specimens for evacuation have necessarily varied according to the kind involved. Practically all the biological material has to be so handled that it may be accessible for service to prevent deterioration and damage, such service including periodic inspection, renewal of fluid in specimens preserved in alcohol, and fumigation against insect pests in other instances. The whole problem is one considerably complicated by the delicacy of many of the specimens.

In several divisions, such as mammals, birds, and reptiles and amphibians, type material for years has been segregated in special collections for its better care. Similar segregation has been planned throughout the department, but because of the magnitude of the work involved it had not been completed until the present emergency. In this regard it must be noted that our collections are more than 90 years old, and that in the early days the full importance of types as such was not wholly appreciated. In many cases, therefore, among our old materials many types have not yet been identified. Such activities have occupied the major part of the time of the staff since December 1941, and the bulk of this work is now completed, or at least well advanced.

Other measures for safeguarding certain collections against the dangers connected with air raids have been adopted in the department of biology, one of the most important of these being concerned with the spirit collections. These are housed in special rooms on the ground floor where the thousands of jars containing the specimens stand on steel shelves. For several years studies have been in progress for a method of better protection of this material against the remote possibility of jar that might be produced by earthquakes. The imminent possibility of vibration from bombing brought these studies to completion, and the measures have been put immediately into effect. Frames have been built across the stands of shelving in such a way as to prevent the specimen containers from falling off the shelves, while at the same time the protective racks can be removed readily to allow access to the material. This work has covered the extensive rooms devoted to reptiles and amphibians, marine invertebrates, fishes, birds, and mammals.

These emergency measures naturally consumed much time and energy. Nevertheless considerable progress was made in the improvement of the installation and preservation of the collections.

The new dioramic groups of moose and caribou were completed and opened to the public, and received general approbation both on account of the fine specimens and for their artistic presentation. The work on three more groups of the same character progressed satisfactorily toward completion. The paintings for the landscape background of both the Rocky Mountain goat and sheep groups were made by Arthur A. Jansson with the supervision and advice of the chief taxidermist, that of the goat group displaying a scene in Yoho National Park, British Columbia, featuring the President Range of mountains in the distance, and that of the sheep group representing a scene 20 miles east of Banff on the road to Calgary, Alberta. Much time was spent experimenting with the lighting of both cases. Work on a proposed Antarctic group consisted chiefly in preparing the birds intended for it, besides making a miniature model of the group under construction. Only slight changes and additions were undertaken in the rest of the exhibition series except for the condensation of the certain special exhibits on variation in the northeast corner hall of the second floor in order to make room for the osteological study collections, which had to be removed from the fourth floor storage. A whistling swan was added to the District of Columbia exhibit, on the ground floor.

In the division of mammals all the skulls and antlers stored on top of the cases on the fourth floor with numerous boxes of miscellaneous bones were placed in a new location on the second floor on racks built for the purpose. Because of the impracticability of arranging this material systematically, lists have been made of it for reference, making it possible to consult it without too much difficulty. Owing to the necessity of providing a safer location within the building for the alcoholic collection of brains belonging to the division of physical anthropology, this was removed to the gallery of room 57, causing some confusion in the arrangement of the mammal collection stored there, which will require considerable time and labor to readjust later on. The condition of the skin collection is satisfactory as no spreading, except in a few groups, will be necessary for some time to come. The difficulty of storing incoming skulls because of crowding has been somewhat relieved for the time being because of the new cases received this year. In the alcoholic collection the routine of preservation was continued.

The men directed by the chief taxidermist remade 68 skins into study specimens, skinned and made up 46 specimens, skinned and salted 30 specimens, in addition to skinning a giraffe. They also cleaned 31 skeletons and 221 skulls, roughed out 13 skeletons and removed 13 from alcoholics, besides doing minor cleaning and repair work. A sun-bear skeleton was mounted and placed on exhibition, and a rhinoceros skeleton was mounted and placed on exhibition, and a rhinoceros skeleton

was dismounted; a whale skull was cleaned, partly repaired, and celluloided. Contract work on cleaning 394 small and medium-sized skulls and 53 skeletons was done under the curator's observation.

In the divison of birds the rearrangement of the study series of bird skins was continued. The following families were gone over in part or whole: Bubonidae, Coraciidae, Cuculidae, Meleagrididae, Motacillidae, Psittacidae, Pycnonotidae, Sylviidae, Tetraonidae, Timaliidae, Tyrannidae, and Tytonidae. In all, between 25,000 and 30,000 specimens were reidentified. This probably is the largest number ever done in one year and comprises the combined efforts of the members of the division staff, together with Dr. Wetmore, Dr. Aldrich, and O. J. Murie. The checking of the card catalog of the alcoholic collection with the specimens was completed, correcting many old errors and omissions, and the index catalog is now up-to-date. In the taxidermist laboratory 95 birds received in the flesh were skinned and prepared, 26 were skinned, 30 were cleaned and made up, two emperor-penguin skins were degreased, 518 skeletons were cleaned, and 121 were roughed out.

In the division of reptiles and amphibians in addition to other routine work 2,699 specimens were cataloged and installed in the stacks, which are now crowded nearly to capacity. A number of turtle skins and skulls were prepared.

In the division of fishes the regular curatorial and custodial routine progressed satisfactorily, particular mention being made of the checking and installation of the large collections returned from Stanford University. The skeleton collection of fishes was reinstalled in 12 new quarter-unit cases. The condition of the study collection is now very good.

In the division of insects rearrangement of the Coccinellidae continued, especially in the species of the Neotropical region, in order that work on the species from Colombia can be undertaken. In connection with the study of this family Mrs. R. F. Mislove prepared several hundred dissections of both male and female specimens, the dissections of the females being mounted in balsam on slides. Except for the unlabeled material, most of the recent accessions were prepared and incorporated in the collection. Essential care was given all study collections, and throughout the various insect groups there were improvements through reorganization of material, mostly dictated by the service activities of the division. This particular phase of the work is carried on by members of the staff of the Bureau of Entomology and Plant Quarantine, except those groups that come under the particular supervision of the curator and associate curator. The slide collections have been expanding very rapidly, and in some cases the available slide storage equipment is crowded far beyond

normal and proper capacity, particularly in the collections of Acarina and ectoparasites. Since December 1941, a large part of the specialists' time not required for identification work has been devoted to type segregation. Necessarily this needs to be done intermittently, and it is not yet completed. The work was completed for the Orthoptera and neuropteroid families, the Acarina and ectoparasites, the Heteroptera, Thysanoptera, Aleyrodidae, Aphiidae, most of the Coleoptera, and all the Hymenoptera except for about one-fourth of the Chalcidoidea.

The following statements summarize the progress made with the study collections and the present status of those collections, under the supervision of specialists on the staff of the Bureau of Entomology and Plant Quarantine. In Orthoptera and in the neuropteroid groups attention was given to the Psocidae, and the Museum collection was largely reviewed and to some extent reorganized, in order to make it more useful for reference in connection with identification needs. Minor improvements were made also in the collections of Orthoptera, where considerable new material from Neotropical areas has been incorporated, and in the Trichoptera. Dr. A. B. Gurney succeeded in segregating all the types before he was called into the Sanitary Corps early in the spring. In those Coleoptera collections for which specialists of the Bureau are responsible, improvements consisted principally of rearrangements of minor groups as required in connection with identification work. Dr. M. W. Blackman, however, reorganized rather thoroughly the Neotropical collections in certain subdivisions of Scolytidae, particularly in the subfamily Micracinae and the tribe Pityophthorini of the subfamily Ipinae; W. S. Fisher rearranged the Monochamini and the Endomychidae following the return of collections on loan to specialists. What probably represents the most conspicuous improvement in the status of collections making up any one assignment in the division is that effected by Dr. J. M. Valentine in the collections in his charge. Since the principal group in his assignments, from the Bureau's standpoint, is the Elateridae, that family received special attention and is now in such condition that the various subdivisions can be taken up independently for critical revision. More or less similar work was done with the Cicindelidae, Carabidae, Mordellidae, and Oedemeridae, especially in the Neotropical series in those groups. A great deal of new material was sorted and properly incorporated, including the Schaeffer types of Elateridae, a good deal of material in the Elateridae, Cebrionidae, and Plastoceridae from the Wickham collection, the Smithsonian-Firestone collection of Carabidae and Cincindelidae from Liberia collected by Dr. W. M. Mann, the Elateridae taken by Dr. E. A. Chapin in Jamaica, and those from Central America contained in the Nevermann collection recently pur-

chased by the Bureau. A collection of West Indian Carabidae, received from P. J. Darlington, Jr., was also incorporated. In the collections of adult Coleoptera as a whole there continues to be steady improvement, which is in part a reflection of studies involved in identification work and in part the result of revisional research such as Fisher's large work on the Chrysobothrini, Blackman's reviews of various groups of bark beetles, and Buchanan's critical studies on weevils of the *Pantomorus* complex. In the larval collections steady improvement has continued, due in considerable part to efforts by Dr. W. H. Anderson and Dr. B. E. Rees to increase the number of definitely identified larvae by association with adults through rearing. The physical condition of the collections of coleopterous larvae is very good. In Lepidoptera, before J. F. G. Clarke's departure for military service, considerable work was done along lines of rearranging various parts of the Lepidoptera collection, involving the incorporation into the main collection of material that has long been housed in special containers and badly scattered. The groups particularly concerned are two subfamilies of the Phalaenidae, butterflies comprising the families Danaidae, Riodinidae, and Lycaenidae, and moths of the families Geometridae and Pyraustidae. The greater part of this material was contained in the Barnes, Owens, Blackmore, and Brooklyn Museum collections, totaling approximately 18,000 specimens. In connection with this work and minor revisional studies, approximately 2,000 slides of genitalia were prepared and added to the special genitalia collections. In addition, the genitalia preparations associated with the Macrolepidoptera were rearranged, and the whole collection was reorganized to allow for as much expansion as possible in the groups receiving special attention. In general, the collection of Lepidoptera can be considered to be excellent, and the material itself is in good condition. There was no outstanding improvement with reference to the collection of lepidopterous larvae, but the usual increment of valuable material, most of it received in connection with identification demands, was added, and more than 300 vials of such material left over from the fiscal year 1941 were properly labeled and incorporated.

In the Hemiptera about 12,000 specimens of leafhoppers and Heteroptera, which have been studied by outside workers, were reincorporated in the collection and some rearrangements made in accordance with revised ideas of classification in those groups. The collection of Aleyrodidae, which was much neglected for many years since no specialist was assigned to the study of this family, required a great deal of renovation and reorganization. All labeled slides were removed from the paper folders in which they were held and cleaned. Approximately 75 percent of them have now been transferred to trans-

parent containers, a change that obviates the need for duplicate labeling. About one-fourth of the regular aleyrodid collection was remounted, the old preparations being unsatisfactory for the critical study that is now required in this group. In Diptera special emphasis was placed on rearrangement of the collection of calyptrate Muscoidea in accordance with the system established in Townsend's "Manual of Myiology." Some special attention was given to the bot flies, upon a revision of which D. G. Hall is engaged. The material in this group, which comprises three families, is now rearranged to conform with Mr. Hall's most recent views concerning relationships. An important item in curatorial work was the relabeling of all the species in the groups assigned to Dr. Alan Stone, which are involved in the name changes resulting from the acceptance of the Meigen 1,800 generic names of Diptera. The pinned collection of Tephritidae, exclusive of *Anastrepha*, was partially rearranged, and a large quantity of alcoholic material belonging to this family was carefully sorted and put into jars. The *Anastrepha* material was recently reorganized upon the completion of Dr. Stone's revision of that group. Until the past year only the genus *Anastrepha*, in this family, has been assigned to Dr. Stone, the balance of the group remaining with C. T. Greene. Now, however, the entire family has been turned over to Dr. Stone. Dr. H. K. Townes identified and arranged in the collection all the Nearctic material of 5 genera of Heleidae and 12 genera of Tendipedidae, involving more than 3,000 specimens and requiring the preparation of approximately 250 slide mounts of genitalia. About one-half of the national collection in these two families of Diptera is now in very good order and accurately determined.

The most conspicuous improvements in the Hymenoptera were in the collections of sawflies and ants. The sawfly collection was arranged by R. A. Cushman to conform with the classification recently proposed by H. H. Ross, thus making Ross's work more or less an index to the location of material in the collection here. This is of considerable value in connection with handling material submitted for determination. Various groups of ants were carefully reworked following more or less detailed taxonomic studies by Dr. M. R. Smith, and some special attention was given to identification of males that have been badly confused and wrongfully associated. As a working reference collection the material can now be considered satisfactory, although there is definite need for authentically named material, especially from the Neotropical region. A considerable amount of material in the bees, much of it representing types, was received from Prof. T. D. A. Cockerell during the year. Several small shipments of bees, including type specimens, which are the property of the British Museum, are temporarily housed in the national col-

lection until conditions warrant shipment to London. In the Chalcidoidea the material belonging to the genus *Monodontomerus* was arranged to conform with A. B. Gahan's published revision of that group; likewise the large collection of the genus *Magastigmus* was reorganized in accordance with a revision now in manuscript by H. E. Milliron. A beginning was made in the Chalcidoidea on the sorting and incorporation of an immense quantity of material that has long been stored in Schmitt boxes. The work on the collection of Thysanoptera has consisted principally in sorting most of the large quantities of miscellaneous unidentified material and the incorporation of the usable slides in the regular collection which was completely reorganized previously, all these slides being placed in transparent containers. Additions to the named collection of Thysanoptera are slow but gradual, and the Museum now has representatives of slightly more than half of the described North American species. Recently some very desirable material from the Neotropical region and New Zealand was received, and most of this was carfeully prepared. In the section of ectoparasites, Acarina, and minor insect orders the arrangement of the collections is substantially the same as at the end of last year except for the Thysanura. This group has been completely reworked for the first time, all the material identified to genus, and much of it specifically named. Some of the collections, which are under Dr. H. E. Ewing's supervision, are now in excellent shape except for the crowding of slides. This is true especially of the Protura, the Anoplura, the parasitic mites, the Siphonaptera, and several of the smaller groups of Arachnida. The collection of Mallophaga, which was considered in rather good order ten years ago, is again in need of rearrangement or relabeling in order to provide up-to-date names in accordance with the results of recent studies. No full-time specialist is engaged on the Collembola, but Miss Grace E. Glance, one of the preparators in the division, has been giving incidental attention to this order during the last two or three years. As a result considerable material received in connection with identification requests was added to the systematic collection which has been reorganized as far as practicable.

In the division of marine invertebrates the study collections, both dry and alcoholic, continue in good condition. As in the other divisions, the alcoholic type specimens were segregated.

In the division of mollusks the greatest achievement was the completion of the segregation of the type specimens from the study collection and their packing ready for evacuation. In addition the incorporation in the study series of the accessions progressed normally. The helminthological collections remain still in the care of the zoological division of the Bureau of Animal Industry of the Department of Agriculture for preservation and study.

In the division of echinoderms the work of identifying, cataloging, and incorporating specimens in the collection continued satisfactorily. The alcoholic type specimens were segregated, and various minor rearrangements and improvements were made in collections, both dry and alcoholic.

In the division of plants 26,596 specimens of flowering plants and ferns were mounted, wholly by adhesive straps, 21,238 of these by contract and 5,358 by Mrs. E. C. White, assistant scientific aide, who, in addition, repaired 10,250 specimens and mounted about 11,000 photographs, descriptions, and cross-reference labels. Specimens to the number of 16,130 were stamped and recorded and thus made ready for the Herbarium. Of mounted, stamped, and recorded specimens (including sheets bearing descriptions and cross-reference labels only) there are on hand about 65,000 awaiting incorporation in the Herbarium, a part of them awaiting identification as well. The Herbarium has been thoroughly fumigated twice, with more frequent fumigation being given to specimens in temporary storage. During the past year and a half the scientific personnel has concentrated on the segregation of type material. The number of types of flowering plants so segregated during the past year and added to the type herbarium is 5,161, almost seven times as many as last year. It was considered best to transfer from the type herbarium to the general herbarium 185 mounted photographs that were unaccompanied by specimens, the net gain to the type herbarium being, therefore, 4,976. The total number of specimens in the type herbarium is now 28,320, all of which are especially cataloged and kept in substantial individual covers. As in the past, E. C. Leonard had immediate charge of the collection of lower cryptogams, and he incorporated in this portion of the herbarium several hundred specimens, mostly mosses and hepatics. John A. Stevenson, honorary curator of the C. G. Lloyd mycological collections, which are on deposit at the Department of Agriculture, reports that these collections proved especially useful during the past year in connection with studies of wood-rotting fungi. With the increasing demand for information on the fungi of South and Central America these collections are invaluable.

INVESTIGATION AND RESEARCH

The usual assistance was given to the staffs of the various Government bureaus dealing with biological problems, in the form of identification of specimens, unification and verification of nomenclature, references to literature, or advice as to means and methods. Such assistance was extended to the Department of State, by advice in international affairs relating to biological questions as to whaling; to the Fish and Wildlife Service and the authorities of the various national

parks; to the Bureau of Animal Industry, by identifying parasites and their hosts; to the Bureau of Entomology and Plant Quarantine, by identifying animals intercepted in cargoes from abroad and advising as to the possibility of their being injurious; to the Public Health Service, by identifying specimens in the course of health surveys; to the Geological Survey, by comparing fossils with recent species; and to the coordinators of information of the various departments relating to problems of defense.

The joint study by Dr. Remington Kellogg, curator of mammals, and Maj. E. A. Goldman, of the Fish and Wildlife Service, on the North and Central American white-tailed deer, although nearly completed, had to be temporarily discontinued because of unforeseen circumstances. Dr. Kellogg devoted some time to a study of the North American pine mice of the genus *Pitymys*. His studies of whales, including further progress on the preparation of text and illustrations for an account of the fossil whalebone whales of the family Cetotheriidae, comparative studies of a series of fetal skulls of blue and finback whales, and further studies on the taxonomy of South American porpoises were continued as opportunity offered. The associate curator of mammals, Dr. David H. Johnson, carried on investigations on the taxonomy of North American squirrels and studied variation in various genera of Oriental mammals. Gerrit S. Miller, Jr., research associate, was engaged in completion of his studies of a collection of Sumatran mammals for the Academy of Natural Sciences of Philadelphia.

The curator of birds, Dr. Herbert Friedmann, completed part 9 of Bulletin 50, the monograph on the birds of North and Middle America, and worked on the manscript of part 10, completing the parts dealing with the turkeys and with the unusually complicated forms and plumages of the ptarmigan, as well as adding to other parts of the manuscript. He also wrote a paper on additional data relating to the birds parasitized by the cowbirds, and another, together with H. G. Deignan, associate curator, on Tschudi's types of Peruvian birds. He began study of the Venezuelan-Brazilian collections made by E. G. Holt and completed accounts of about 70 forms. He published two short papers on South American birds as a result of these studies and also a report on a large collection of bird bones from old Eskimo habitations on Cape Prince of Wales, Alaska. In addition, Dr. Friedmann served as a member of the Smithsonian War Committee. The late associate curator of birds, J. H. Riley, devoted considerable time to the card index of scientific names of birds. The associate curator, H. G. Deignan, continued his work on the birds of northern Thailand and completed a large part of the Passeriformes. He published four papers dealing with new forms discovered in the course of this work.

The assistant curator, S. D. Ripley, 2d, studied aspects of speciation in birds from the islands west of Sumatra and had finished the non-passeriformes when his release was requested for service more directly connected with the war effort. He published a short popular article on oil pollution in sea birds on the New England coast. Dr. Wetmore published a report on a large collection of birds from North Carolina and completed the examination of specimens in his work on birds from Veracruz, Mexico. He studied some of his Colombian material and published descriptions of a number of new forms from Colombia and Mexico, two papers on fossil birds, and several short notes on bird records of interest. He also published an address delivered at the opening of the Dyche Museum of the University of Kansas and wrote the foreword to Col. Edgar E. Hume's book, "Ornithologists of the Army Medical Corps."

The curator of reptiles, Dr. L. Stejneger, continued his studies of American turtles. The work of Dr. Doris M. Cochran, associate curator, on Brazilian frogs progressed as circumstances permitted.

The curator of fishes, Dr. L. P. Schultz, published a number of papers chiefly on American tropical fishes, as well as one on the fishes of Glacier National Park, Mont. In addition he completed a manuscript on the fresh-water fishes of Liberia, in which seven new species are described. He also published a paper on *Garrupa nigrita* (Holbrook) jointly with E. D. Reid, aide. After the death of Dr. Hugh M. Smith, Smithsonian associate curator of zoology, Dr. Schultz organized and edited Dr. Smith's manuscript on the fresh-water fishes of Thailand and supervised the drawing of 30 figures representing the new species.

The curator of insects, Dr. E. A. Chapin, continued his studies, especially those resulting from his recent trip to Colombia, and made some progress in supplying desired information to Dr. L. M. Murillo, government entomologist of Colombia. With other members of the Museum staff he collaborated in the project calling for the preparation of a catalog of insects of the Neotropical regions. Considerable progress was made in the Odonata by the curator, and in the Coleoptera by the associate curator, Dr. R. E. Blackwelder.

The research work by the staff members of the Bureau of Entomology and Plant Quarantine may be briefly summarized as follows: In the Orthoptera and the neuropteroid groups work was continued on the grasshoppers comprising the subfamily Cyrtacanthacridinae of the Middle West. As Dr. A. B. Gurney was called into the Army, the grasshopper study was laid aside indefinitely. A paper presenting a synopsis of the psocids comprising the tribe Phyllipsocini was completed. In the groups of Coleoptera under the supervision of H. S. Barber some preliminary research was conducted in the genera *Chalepus*, *Paria*, and *Rhabdopterus*, and a short paper dealing with taxon-

omy and nomenclature of various common species of *Dermestes* was completed. W. S. Fisher began revisional studies in the Bostrichidae and the Anobiidae, undertaken because the groups are of considerable economic importance and are in a badly confused state from a taxonomic standpoint. The discovery of another new white-fringed beetle in Florida induced a restudy of the entire white-fringed beetle problem by L. L. Buchanan, and a paper embodying the results of his investigations was virtually completed. The work involved detailed study of an enormous number of individual specimens collected in the Gulf coast region and also study of all available material from South America. Analyses of especially troublesome genera and species groups for purposes of identification were made by Dr. J. M. Valentine in the Cicindelidae, Carabidae, Elateridae, and Anthicidae. More than 20 genera are involved, and in several cases the work has progressed to the point of outlining papers for possible publication. The family Elateridae represents a group of much economic importance yet badly neglected by taxonomists. It is in need of much serious work, and Dr. Valentine will for the present concentrate on various genera in this group. As a background for this study, the types of most of the North American species were examined and compared with the National Museum material. All the West Indian material available was carefully reviewed, and a good deal more has been borrowed from the Museum of Comparative Zoology. It is intended to preface the projected paper on West Indian *Conoderus* with an illustrated treatment of related genera and subgenera. A considerable number of the drawings have already been prepared, and most of the basic revisional work has been done. Dr. M. W. Blackman completed studies of the Pityophthorini from Mexico and tropical America involving the description of a new genus and 43 new species. Dr. W. H. Anderson outlined a revision of larvae of Rhyncophora. Provisional generic keys to four of the tribes were prepared. In addition to his work on coleopterous larvae Dr. Anderson studied adults of the meloid genera *Epicauta* and *Macrobasis*, with the object of preparing revisions of these two economic groups. It now develops, however, that an outside worker is also engaged on a study of the same genera, and for the present Dr. Anderson's work has been discontinued. Dr. B. E. Rees continued his studies of the larvae of Coccinellidae and Dermestidae. He prepared a tentative key to the genera of Coccinellidae and shortly before being called for military service completed a classification of the Dermestidae based on larval characters and including a key to the North American genera.

In Lepidoptera, before his departure for military service in February, J. F. Gates Clarke did some research work on several groups contained in his assignments. Studies in the Phalaenidae, with a view to reclassification based on genitalia, were accelerated, and

intermittent work was done on a projected revision of the Microlepidoptera comprising the family Phaloniidae, but this is still in the early stages. His catalog of the microlepidopterous fauna of the State of Washington now contains more than 500 pages of manuscript but in many sections will need extensive revision. A new lepidopterous pest of mimosa in the District of Columbia and vicinity, apparently representing an introduction from Australia, was rather thoroughly investigated by him and a paper completed for publication describing the insect and the damage it causes. H. W. Capps continued work on certain groups in the family Geometridae, particularly the Ennominae and Claphyriinae, but this research has not progressed beyond the preliminary stages; the study of the Glaphyriinae was discontinued, since this group is of no special economic importance. Carl Heinrich in cooperation with Mr. Capps gave special attention to the development of an illustrated key to the families of North American Lepidoptera based on larvae. Further studies were carried on in an effort to clarify the taxonomy of the complex known as *Symmerista albifrons*, and large series of moths and slides have been carefully studied. Progress on Mr. Heinrich's long-time project, involving the classification of the Phycitidae, consisted essentially of the preparation of numerous genitalic illustrations. W. D. Field continued research in the arctiid subfamily Lithosiinae, reviewing large quantities of material in the collection and making many genitalic slides. Meanwhile a revisional study was begun in the hesperid genus *Erynnis*. Thus far approximately 300 genitalia slides have been made, and from their study the males of all the species have been properly associated. This represents an important forward step since the material was previously in great disorder.

In Hemiptera, H. G. Barber continued work on a review of the lygaeid genus *Nysius*. He also gave some attention to the pentatomid genus *Chlorochroa*. Dr. P. W. Oman's work on the generic revision of the Cicadellidae was continued. Because of the attention that has been attracted to certain genera of leafhoppers, the members of which are vectors of important plant diseases, it has been necessary to begin synoptic studies of some of these in order to establish as definitely as possible the limits of species contained in them. The genera to which Dr. Oman has devoted especial attention are *Phlepsius*, *Helochara*, *Draeculacephala*, and *Macropsis*. He also began some intensive work on the classification of the immature stages of Psyllidae with particular reference to the differentiation of the pear psylla from related forms occurring in the same habitat. In the Aleyrodidae, Miss Louise Russell concentrated on the genus *Trialeurodes* and completed the first draft of a revision of the Nearctic species. Research in the aphids

consisted of intermittent work on certain groups that are abundantly received for identification and that are in need of exact study. Work on the genus *Kakimia* was continued, and beginning was made on a study of the genus *Macrosiphum*, which contains numerous economically important species, some of them vectors of plant diseases. The large project involving classification of the families of Diptera on the basis of larval characters was temporarily laid aside and attention focused on a study of the dipterous larvae commonly intercepted by plant quarantine officers. This is of considerable importance from the Bureau's standpoint at present, since it is felt that the inspectors should be given some practical guidance in the recognition of the more important and more commonly intercepted dipterous larvae. Another study in larvae of Diptera, upon which C. T. Greene has begun work, concerns the economic species of Agromyzidae comprising the genus *Liriomyza*. Considerable progress was made by D. G. Hall on a revision of the bot flies. Tentative keys for separating the genera and species were prepared. Virtually all the time Dr. Alan Stone was able to find for research was devoted to a review of the Nearctic Simuliidae, begun last year. The work on the adults is rather well along, but much remains to be done with the pupae and larvae. Dr. H. K. Townes carried on research in the dipterous families Heleidae and Tendipedidae. In the former he completed a preliminary study of the Nearctic species of six genera and prepared tentative keys to the species of each genus. Altogether 54 species are involved. Before being appointed to the division, Dr. Townes had a revision of the Nearctic Tendipedini well along, and intermittently he has continued with this. Keys to the genera and species had been prepared, and descriptions of 138 of the 198 known Nearctic species have been completed.

In the Hymenoptera research consisted largely of continuing work on A. B. Gahan's proposed key to the families of Chalcidoidea. Some serious difficulties have been encountered in the complexes surrounding the Pteromalidae, Callimomidae, and Eurytomidae, and it was felt that some of the immense amount of unsorted material might contain series that would be of assistance on this problem. Accordingly, sorting and identification of that large accumulation of specimens were begun. As he progressed with his study of the ichneumonid genus *Ophion*, R. A. Cushman found that a prerequisite to satisfactory treatment of the group is a clarification of the generic limits of the tribe Ophionini. A tentative key to the world genera of this group was devised and approximately 80 drawings, to be used in illustrating this key, were prepared. He also redefined various genera of Ichneumonidae proposed by Ashmead, concerning the identity of which there has been much confusion. Dr. M. R.

Smith completed a study of the legionary ants of the United States, and made excellent progress on a generic classification of North American ants based on males. Jointly with Dr. C. E. Mickel, of the University of Minnesota, Karl V. Krombein completed a paper on species of the genus *Glyptometopa* and related genera in the Brachycistidinae. Three short papers completed by Mr. Krombein describe new species of wasps and include a revision of the West Indian Myzininae.

In Thysanoptera, J. C. Crawford is emphasizing the improvement of the collection and the description of new miscellaneous species received among materials submitted for determination. Dudley Moulton, a thysanopterist of Redwood City, Calif., was given appointment in this division for a period of six months and has already done a good deal of work on the economically important genus *Frankliniella.* In ectoparasites, Acarina, and minor orders, the generic classification of the fleas by Dr. H. E. Ewing and Irving Fox was completed early in 1942 and submitted for publication. The research work on chiggers, which was started last year by Dr. Ewing, was also completed, and the results are embodied in a paper entitled, "The Taxonomy of Some American Chiggers, Including Descriptions of New Genera and Species." Jointly with H. S. Nesbitt, Dr. Ewing investigated the taxonomy of the economic grain mites, and a paper on this subject was completed.

A detailed study of the "Skeleto-Muscular Mechanisms of the Honey Bee" was completed by R. E. Snodgrass and submitted for publication in the Smithsonian Miscellaneous Collections.

Dr. Waldo L. Schmitt, curator of marine invertebrates, continued studies on the marine and fresh-water Crustacea of South America. A revision of the endemic South American fresh-water genus *Aegla* and the description of a new species of sandbug, with a revision of the genus *Blepharipoda* to which it belongs, were completed. Clarence R. Shoemaker, associate curator, devoted a considerable part of his time to a comprehensive report on the amphipods of the Bermuda oceanographic expeditions of the New York Zoological Society. J. O. Maloney, aide, continued to identify isopods taken from plant importations by the Bureau of Entomology and Plant Quarantine. He completed a paper dealing with the Isopoda of the Presidential Cruise of 1938. Dr. R. S. Bassler reports that a collection of 150 jars of dredgings from the Gulf of Lower California, many rich in well-preserved Bryozoa, was sorted and the specimens placed in the collection, ready for further study. From time to time progress was made in identifying odd lots of specimens from the old *Albatross* dredgings. Many types of recent Bryozoa were selected and packed with the fossil forms for evacuation. Dr. J. A. Cushman,

collaborator in Foraminifera, reports that further work on the fourth and final part of "The Foraminifera of the Tropical Collections of the Albatross, 1899–1900" was done. Studies of some of the recent genera were made in connection with the fossil species of the same genera.

The curator of mollusks, Dr. Paul Bartsch, in collaboration with Dr. Carlos de la Torre, of Habana, continued his studies on Cuban land mollusks, the year's endeavors being focused on the family Urocoptidae. Dr. Bartsch moreover published "A Synopsis of the Philippine Land Mollusks of the Genus *Hemitrichia*" and "New Species of Urocoptid Land Mollusks from Mexico." The curator and Dr. H. A. Rehder, associate curator, continued researches on the Hawaiian gastropods. Dr. Rehder likewise continued minor researches, principally on the West Atlantic marine fauna. Dr. J. P. E. Morrison continued work on the American Amnicolidae, especially on the group inhabiting the springs and caves in Virginia. Researches upon helminths were conducted by the members of the staff of the zoological division of the Bureau of Animal Industry.

Dr. T. Wayland Vaughan and Dr. John W. Wells continued studies on corals.

In the division of echinoderms, the curator, Austin H. Clark, in collaboration with Gordon J. Lockley, of the British Museum, prepared a report upon the most recent collection of Greenland echinoderms assembled by Capt. Robert A. Bartlett. All other time that could be spared from the usual routine and from work in connection with safeguarding the collection was devoted to the completion of Bulletin 82, "A Monograph of the Existing Crinoids."

In the division of plants as in all the other divisions the threat of war and finally war itself resulted in a redistribution of the emphasis placed on the various lines of work. The segregation of type material for special safekeeping was considered of prime importance, and the number of types segregated is many times greater than the average of preceding years. To determine which among the approximately 1,800,000 specimens in the general herbarium constitute type material requires a vast amount of research, involving the constant consultation of literature, inasmuch as only a small fraction of the types are so indicated. Through W. P. A. assistance many thousand descriptions were copied during recent years, and these have been of inestimable value in detecting the types. Obviously, however, these descriptions have had to be sorted and made ready for filing in the herbarium before they could be so used. The return of material here on loan from other institutions has been considered of importance second only to the segregation of types, in view of the national situation. The greater part of this material belonged to groups in which the members of the

staff were recognized specialists. The study of some of this material was completed and the loans have been returned, and every effort will be made to return the rest of it as possible, thereby relieving the division of the responsibility of safeguarding the property of other institutions in the event of attack. Dr. W. R. Maxon continued his studies of tropical American ferns. E. P. Killip, associate curator, collaborated with Colombian and Venezuelan botanists in the study of the flora of those countries and carried on the work of organizing the South American collections, giving special attention to groups of economic importance. E. C. Leonard, assistant curator, prepared an account of the Acanthaceae of the Sonora Desert region. C. V. Morton, in connection with his study of Gesneriaceae and Solanaceae, wrote three papers, and also prepared a report on the M. E. Jones collection from Mexico. Dr. E. H. Walker, assistant curator, prepared a report on certain Asiatic Myrsinaceae submitted to him by the Arnold Arboretum. He also directed the activities of the Conference on District of Columbia Flora, which issued a checklist and several preliminary treatments and bulletins. Mrs. Agnes Chase gave much attention to Venezuelan grasses and assisted several South American botanists who were pursuing their studies at the National Herbarium.

The number of specimens identified totaled at least 25,000 (in the division of plants 13,657; marine invertebrates 4,370). Specifically the number of lots with request for identification was as follows: Mammals, 32; birds, 35; reptiles and amphibians, 13; fishes, 25; insects, 79; marine invertebrates, 64; mollusks, 83; helminths, 5; corals, 2; echinoderms, 40; plants, 232.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions aggregated 664 specimens and 1,029 specimens were sent out in exchange. The 16,601 plants distributed were sent out as exchanges to 69 institutions and correspondents; of them 58 were in the United States and 11 in other countries. In addition about 6,000 duplicate specimens of plants were set aside for dispatch to various foreign institutions, among them a considerable number to Brazil and Argentina, in continuation of exchanges, as soon as conditions permit.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The summary of specimens given below is based on the numbers estimated for the previous fiscal year with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time.

Several collections, such as the corals, of which no estimate has as yet been made, are not included, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions lots consisting of minute organisms are frequently counted as single specimens though they may contain hundreds and even thousands of individuals the enumeration of which could serve no useful purpose.

Mammals		243,689
Birds:		
Skins	283,429	
Alcoholics	10,066	
Skeletons	17,928	
Eggs	90,304	
		401,727
Reptiles and amphibians		125,313
Fishes		1,213,344
Insects		5,405,643
Marine invertebrates		1,035,860
Mollusks		2,985,521
Helminths		146,173
Echinoderms		169,020
Plants		1,819,800
Total		13,546,090

DEPARTMENT OF GEOLOGY

(R. S. Bassler, *Head Curator*)

The anticipated decrease in the quantity of geological materials received during the year, through the loss of foreign sources, has been compensated by the gains made in the care of the collections, due also to war conditions. Safety required not only the removal to lower floors of the large series of rocks, minerals, and fossils hitherto stored on the fourth floor, but also segregation of the many thousands of irreplaceable type specimens for storage elsewhere during the emergency. This work, under the able direction of Curator C. E. Resser, occupied most of the staff for more than two months. Likewise, all members participated in the selection, listing, and packing of the type specimens, which extended over a still longer period. Notwithstanding the time thus occupied, several important research problems were advanced, and a few large manuscripts have been sent to press or are well on the way to completion.

The allotment of funds from the Smithsonian Institution and the cooperation of several defense bureaus enabled five members of the staff to pursue active field work. Thus, in cooperation with the U. S. Geological Survey, Curator W. F. Foshag spent more than half of the year in Mexico supervising surveys for strategic minerals. Associate Curator E. P. Henderson and others of the department have been engaged on various defense problems, mainly in the office where they furnished information to war agencies and instructed their representatives on geological matters before they left for their field assignments.

In the several divisions of paleontology, field work in the summer of 1941 designed to build up the exhibition and study series comprised two extended trips to the western United States and Canada. The first, to Texas and Oklahoma by Associate Curator G. A. Cooper, resulted in large and unique collections of Pennsylvanian and Permian fossils; the second, to the Canadian Rockies and Wasatch Mountains by Dr. Resser, yielded important stratigraphic information and many Cambrian trilobites and other invertebrate fossils. In 1942 Curator C. W. Gilmore headed a party starting in early June to explore the Oligocene rocks of eastern Wyoming and western Nebraska, where good progress in the discovery of mammalian remains has already been reported. Associate Curator C. Lewis Gazin conducted explorations in the summer of 1941 in the Eocene Bridger formation and Palaeocene deposits of

southwestern and western Wyoming, respectively, to obtain material for the mammalian study series. He concluded the season with a trip to Fort Peck, Mont., where the Cenozoic gravels of that area were investigated for fossil vertebrate animals.

ACCESSIONS FOR THE YEAR

The number of accessions for the year totals 138, comprising approximately 32,418 specimens, as compared with 168 accessions last year with 55,818 specimens. The individual records for the several divisions are as follows: Mineralogy and petrology, 57 accessions (186 specimens); physical and chemical geology, 8 accessions (92 specimens); invertebrate paleontology and paleobotany, 57 accessions (31,972 specimens); vertebrate paleontology, 16 accessions (168 specimens).

Mineralogy and petrology.—The most important specimens of the 156 minerals added to the Roebling collection by 13 accessions through purchase from this fund are the following: A large, deeply etched aquamarine from Agua Preta, Minas Geraes, Brazil, the finest single specimen acquired during the past year; exceptional examples of the copper minerals diaboleite, shattuckite, dioptase, linarite, and the lead carbonate cerussite, from the Mammoth Mine, Tiger, Ariz.; an unusual crystallized turquoise, from Lynch Station, Va.; a fair-sized monazite crystal, from Municipio do Ferros, Minas Geraes, Brazil; and a mass of the phosphate lithiophilite from Newry, Maine.

The three accessions credited to the Canfield fund contained exceptionally fine minerals, of which the most noteworthy were secured by the purchase of choice specimens from Dr. Otto Runge's collection.

Other notable specimens added to the mineral collections are as follows: A specimen of native copper from Puriscal, Costa Rica, presented by Alfonso Segura, of the Museo Nacional de Costa Rica; a specimen of arsenical antimony, allemontite, from Varuträsk, Sweden, a gift of Drs. Percy Quensel and P. E. Wretblad, of the Stockholm Hogskolas Mineralogiska Institut, Stockholm, Sweden; several chalcedony pseudomorphs formed after fossil corals at Tampa Bay, Fla., received from Frank Ingram; a millerite specimen from Edwardsville, Pa., donated by Anthony Lipski; a selected lot of staurolites, the interesting cross stone crystals, forwarded by Dr. Harry B. Johnston; a specimen of the manganese sulphide, alabandite, from Santa Cruz Mine, Mexico, received from Arthur L. Flagg; a selection of feldspar crystals from Sierra Blanca, Tex., presented by J. B. Carson; and an unusual uranium specimen composed of uraninite, uranophane, and gummite from Keystone, S. Dak., the donation of F. W. Horton, of the U. S. Bureau of Mines. Jenaro González, of the Instituto Geológico de México, presented a specimen of magnetite from Isla Mar-

garita, Baja California; Prof. Vincent P. Gianella continued his interest in the collections by donating three Nevada minerals—the hydrous copper arsenic mineral, clinoclasite, from Majuba Hill, and the magnesium compounds, brucite and hydromagnesite, from Paradise Range; and Prof. Lawrence Whitcomb presented one lot of Ordovician bentonite from Reedsville, Pa.

The bequest of Mrs. Mary Vaux Walcott brought the most outstanding additions to the gem collection. Among these a valuable 12-carat gemstone, alexandrite, possessing an attractive change of color, a string of pearls, and 14 necklaces of gem quality should be especially mentioned. Each necklace is composed of well-matched stones of a single mineral, amber, quartz, citrine, lazulite, fossil wood, serpentine, amethyst, agate, and ivory being included in those represented. A polished specimen of California obsidian having unusual colors combined with a purplish sheen was presented by Archibald N. Goddard. A strand of jade with a unique reddish-brown color, and a remarkably fine piece of polished green Burma jade were purchased through the Frances Lea Chamberlain fund. An andalusite of unusual size and beauty, 7.7 carats in weight, from Minas Geraes, Brazil, was also acquired through this fund.

The collection of meteorites was enlarged by additions recorded in nine accessions. Dr. Stuart H. Perry presented a complete specimen of the Rose City, Mich., stony meteorite, weighing 2,690 grams, one of the largest individuals of that fall. A specimen of the Santa Rosa, Colombia, meteorite was received by exchange with the Laboratorio Químico Nacional de Análisis e Investigación, of Bogotá, through Dr. Jorge Ancízar-Sordo. J. H. Marsman donated four specimens of tektites from Paracale Bay, Philippines, while another of these peculiar structures with a glasslike interior and unusual surface etchings was obtained by purchase through the Roebling fund. Other specimens secured for this collection through the Roebling fund include the following: The large Carlton iron, 623 pounds, which forms a part of the Tucson, Ariz., meteorite and is a member of the same shower as the Museum's Ring meteorite; a 15-pound stone individual of the Plainview, Tex., fall; a 566-gram iron constituting a new discovery from Wathena, Kans., an ataxite which has been analyzed but not yet described; a stony meteorite, 730 grams, from Boelus, Nebr., still awaiting study; and a slice of the Potter, Nebr., stone, a weathered chondrite.

Among the ores accessioned during the fiscal year, the outstanding example is the 184-pound mass of cassiterite from Goodwin Gulch, Seward Peninsula, Alaska, received as a transfer from the United States Geological Survey. This rare specimen, a placer boulder, perhaps the largest single piece of this tin mineral ever found, forms an interesting exhibit. Additional transfers are a series of mercury ores

from Oregon, important in defense work, from the United States Geological Survey, and a series of Terrazzo marbles, from the National Bureau of Standards. Through the kindness of J. H. Ashley, of Fresnillo, Zacatecas, Mexico, there was received from the Fresnillo Co. six silver-lead ores illustrative of the economic geology of that area.

The main additions to the rock collection resulted from the revision and condensation necessary to accommodate the petrographic material transferred from the fourth floor. Many of the specimens were found to be best suited for preservation in the rock series which, as a result, has been considerably enlarged.

Invertebrate paleontology and paleobotany.—The number of accessions and total specimens received in this division during the past year decreased less than was expected under existing conditions. The most noteworthy acquisition was the transfer from the United States Geological Survey of more than 1,500 type specimens of fossil invertebrates described and illustrated by Dr. L. W. Stephenson in his report entitled "The Larger Invertebrate Fossils of the Navarro Group of Texas" (Publication 4104, University of Texas). Next in importance are the collections of invertebrates from various Paleozoic formations of Oklahoma and Texas resulting from Dr. G. A. Cooper's field work of the summer 1941. Approximately 4 tons of limestone blocks containing beautifully preserved silicified fossils suitable for freeing from the rock by etching with acid were secured by him in the Permian formations of the Glass Mountains of Texas. Similarly, the field work of Dr. C. E. Resser brought in about 8,000 invertebrate fossils from the Cambrian and Devonian rocks of Montana, Utah, and the Canadian Rockies.

The peculiar Paleozoic corallike group Stromatoporoidea, of the biologic series, received special attention during the year. Two gifts and three exchanges were arranged, the former from the New York State Museum and the latter from the Royal Ontario Museum of Paleontology and Peabody Museum of Natural History, whereby small slices of the type specimens in their respective collections were secured. The thin sections prepared from these fragments have now made the national collection a truly representative one for research in these organisms.

The echinoderm series, in spite of the rarity of these fossils, was further enhanced by valuable material. A set of topotypes of the very primitive Middle Cambrian echinoderms from Australia, described by Prof. F. W. Whitehouse, was a gift from the University of Queensland. An exchange from Max J. Kopf added 97 specimens of starfishes, crinoids, and blastoids from the Trenton and Hamilton formations of western New York and Canada. From the same forma-

tions in Ontario specimens of other rare echnioderms were secured by purchase. An especially good collection of crinoids from the Lower Mississippian rocks of Iowa, containing exhibition slabs as well as free individuals for the study series, also was purchased.

A representative set of Cambrian and Ordovician trilobites and other invertebrates from the celebrated Levis conglomerate outcrops came as a gift from Prof. Franco Rasetti.

A welcome addition to the ostracod collection was a gift from Dr. William H. Deaderick made up of 31 lots consisting of many thousands of specimens selected from the various Upper Cretaceous formations of Arkansas. Other Cretaceous fossils worthy of mention comprised topotypes of invertebrates from California, an exchange from Stanford University, and rare crabs from North Dakota, the gift of William A. Cobban.

In the section of Cenozoic invertebrates, 11 accessions were recorded, aggregating about 500 specimens. The most significant material came to the collections as donations, as follows: 103 casts of Cenozoic molluscan types from the University of California Museum of Paleontology, Berkeley; 7 topotypes of the gastropod *Goniobasis effosa* Maxwell Smith from Belle Glade, Fla., presented by Mr. Smith; about 59 specimens of Middle Miocene fossil shells from Costa Rica, from the Museo Nacional de Costa Rica, through Alfonso Segura P.; 60 specimens of Pleistocene fresh-water mollusks from Bolivia, gift of Martín Cárdenas, of Cochabamba; and type specimens of California Pliocene Foraminifera, from M. L. Natland.

The accessions to the fossil plant collection were few in number but were interesting for several reasons. A number of plant-bearing concretions from the Coal Measures near Wilmington, Ill., the gift of George Langford, represented a new occurrence for the Mazon Creek flora so well represented in the Museum series of types. A new species of fossil vine, presented by Mark M. Foster and described by Dr. R. W. Brown, was of especial interest in its relation to the opals from Rainbow Ridge Fire Opal Mine, Nevada, where the specimen was found. Fossil wood from California, gift of Carl J. Bleifus, was valuable in showing the occurrence of Teredo borings within it; and a polished slab of fossil elm from the petrified forest of Mojave Desert, Calif., was an important addition to the wood series.

Vertebrate paleontology.—The accessions for this division numbered 16, covering an estimated total of 168 specimens, as compared with 20 accessions comprising 182 specimens for the year 1940–41.

The outstanding accession for the year was the collection resulting from the field expedition of the past summer to the Bridger formation of Wyoming. The party secured 120 lots of unsually good materials of the smaller mammals. One specimen worthy of particular note is the lower jaws and parts of the skeleton of the rare *Stylinodon*. Good

material was also collected of the early rhinoceros *Hyrachyus* and the primitive titanothere *Palaeosyops*. A large slab of turtle remains was excavated and shipped for preparation in the laboratory as a striking exhibition piece. A small collection of Paleocene mammals was obtained from western Wyoming.

Through exchange with Vanderbilt University the type collection was enriched by 15 fossil turtle specimens, of which five were original types, as follows: *Trachemys jarmani*, *T. sculpta*, *Deirochelys floridana*, *Pseudemys extincta*, and *Macrochelys floridana*, all described by Dr. O. P. Hay. A composite skeleton of the very primitive spined reptile, *Edaphosaurus boanerges* Romer, from the Permian of Texas, an excellent specimen for mounting for exhibition, was received from the Museum of Comparative Zoology in completion of an exchange of the previous year.

Important zeuglodont specimens and a unique primitive titanothere skull and jaws from the Jackson and Lisbon formations, respectively, of Mississippi, were deposited by Prof. J. Magruder Sullivan. Primitive vertebrate remains from concretions in the Coal Measures of Illinois, among the rarest of Paleozoic finds, were included in a gift from George Langford.

The cetacean collection was enriched by a number of incomplete specimens from the Calvert formation of the Chesapeake Bay region, received from various sources.

INSTALLATION AND PRESERVATION OF THE COLLECTIONS

Progress under this heading has been of a quite different nature from that of previous years, for all members of the staff were occupied a substantial portion of the time in providing suitable safety for the collections. The removal of the rock, mineral, and fossil series stored in the east section of the fourth floor to more secure locations on the lower floors was of such prime importance that to secure the necessary space the building stone hall on the second floor had to be converted into a storage space. A duly appointed committee recommended that the building stone exhibit be reduced in size and that specimens that had outlived their usefulness be made available to other Government bureaus. As a result, a considerable portion of such material was accepted by the National Bureau of Standards for use in testing the weathering conditions of various types of building materials. The space thus obtained made room for a portion of the rock series and all the Paleozoic invertebrate fossil collections. Then, the paleobotanical collections formerly occupying the northern half of the fourth floor were removed as a unit into two rows of cases 9 feet high lining both sides of the northeast basement hallway. The Mesozoic fossil collection was placed similarly along the west side of the east basement hallway. Before removal each of these large collections was con-

densed by elimination of much duplicate material, a task in which most of the staff had a part.

Subsequently came the packing of type specimens throughout the department for evacuation from the building, a task of such size that an entire year would have been required, instead of several months, had not the members of the Geological Survey located in the Natural History Building given their wholehearted assistance.

Last year's plan to divide the western half of the physical geology hall into three large alcoves was advanced to the completion of the necessary construction work so that the exhibition work has just now been inaugurated. Reduction of the collections stored in the fourth floor, the shifting to other locations, as well as rejection of much duplicate material required most of E. P. Henderson's time since January when this work began. The head curator, however, found time to complete the relabeling in more popular form of the two remaining alcoves, namely, those devoted to glacial phenomena and rock structures. Illustrative diagrams and photographs are being added as fast as good material can be obtained.

In the study series of minerals, work in the consolidation of the three mineral collections into one series progressed to the completion of slightly more than one-half the entire set.

B. O. Reberholt was as usual occupied in cutting and polishing rocks, minerals, and meteorites for exhibition purposes and in general work connected with the rock cutting laboratory. He reports the preparation of 682 thin sections and the slicing and polishing of 165 fossils, rocks, ores, and meteorites.

As noted before, Dr. C. E. Resser was engaged during the major part of the year in supervisory work connected with the transfer of all collections and packing of types for evacuation so that progress, other than routine care, was not made on the particular materials in his care. Associate Curator G. A. Cooper completed the preparation of various lots of Pennsylvanian fossils obtained on his summer's field trip from the midcontinent area, particularly in Texas and Oklahoma, with the result that the Museum now has excellent representations from this region for study.

With the return of the large graptolite collection lent to the New York State Museum for monographic study by Dr. R. Ruedemann, the head curator undertook the preparation and arrangement of this material. The final labeling and cataloging must await the publication of Dr. Ruedemann's monograph. He continued work upon the arrangement and expansion of the biologic series of Paleozoic corals, which now occupy about 500 standard drawers. Several hundred thin sections of characteristic corals were added to the slide series and a new set prepared from fragments of type specimens

secured from other museums was built up for the Stromatoporoidea, allied Paleozoic coelenterates.

The rearrangement of the stratigraphic series made the materials so readily available for study that the Mesozoic collections especially received a greater amount of preparatory work than otherwise possible. Drs. J. B. Reeside, Jr., Ralph W. Imlay, and L. W. Stephenson, of the United States Geological Survey staff, were active in this work. The Cenozoic collections through the work of the Survey specialists have been much improved.

In the section of paleobotany, the collections were particularly enriched by Dr. R. W. Brown's field work in Mesozoic and Cenozoic formations where he searched especially for fruits and seeds as checks upon the leaf identification so largely relied on in the past. The preparation and study of these materials were completed. He also collected many plant and animal remains as evidence for the determination of the Cretaceous-Tertiary boundary in the Rocky Mountain region.

In the division of vertebrate paleontology, C. W. Gilmore reports that during the past year a nearly complete skeleton of *Crocodylus clavis* Cope, from the Middle Eocene Bridger formation of Uinta County, Wyo., was mounted for the exhibition series. This specimen was freed entirely from the surrounding rock and is unique in being the first complete extinct crocodile skeleton to be exhibited in this country.

In addition to mounting the crocodile skeleton and supervising preparatory work in the laboratory, Norman H. Boss, chief preparator, is well advanced with the work of articulating a skeleton of the primitive reptile *Edaphosaurus*. At various times he was also called upon to prepare a number of delicate fossil remains. T. J. Horne completed mounting the skeleton of the large primitive mammal, *Uintatherium robustum*, mentioned in last year's report, with excellent result. The specimen is notable as being the most complete skeleton of this animal yet found. Mr. Horne devoted the remainder of his time to the preparation of the 1941 and 1942 fossil collections from the Bridger formation.

As a result of the combined preparatory work, all the 1940 and about half of the 1941 collections from the Bridger formation in storage have been completely prepared and arranged in the study collections. Associate Curator C. L. Gazin reports that most of these collections have been sorted, arranged, and partially identified.

INVESTIGATION AND RESEARCH

Dr. E. O. Ulrich, associate in paleontology, continued the study of his collections of past years, checking his identifications and revising

their stratigraphic position. As always, his knowledge and experience were at the service of coworkers.

Three members of the staff, Drs. Resser, Cooper, and Bassler, were occupied at intervals during the past year in paleontological investigations requiring some research but particularly the illustration of many specimens in the national collections. This was in connection with assistance furnished in rewriting and illustrating the chapters on the trilobites, brachiopods, and bryozoans for a new edition of the standard manual of paleontology, "North American Index Fossils," by Shimer and Shrock. As a byproduct of this work, Dr. Cooper prepared a paper describing 20 new brachiopod genera. He has also concentrated on bringing near completion the Chazyan brachiopod monograph that he has had under study in collaboration with Dr. Ulrich for several years. This has involved preparing photographs for approximately 100 plates that will be required to illustrate the 500 or more species described in the work.

Dr. Resser's research resulted in the publication of the fifth in a series of nomenclatorial papers and a work on the Cambrian Maryvale formation of the southern Appalachians based on his recent field work. In addition, he completed and submitted for printing a study of the Grand Canyon Cambrian faunas and an extensive article describing many new Upper Cambrian trilobite species. As a result of a talk on fossil roses, he was requested to prepare an article on the subject, which was accordingly published in the 1942 Rose Annual.

The head curator, in preparatory work upon the coral collections, took the opportunity to study several complex families, so that manuscripts upon these subjects are well under way. The "Bibliographic and Faunal Index of Paleozoic Pelmatozoan Echinoderms," mentioned last year as practically completed, was accepted for publication by the Geological Society of America.

Dr. Charles Butts progressed with his studies on the geology of western Virginia in cooperation with the State Survey. In the course of the year he prepared and studied many of the Paleozoic faunas of the Appalachian Valley.

Work upon the echinoderms was continued by Dr. Edwin Kirk, three publications being issued during the year. Lloyd Henbest, of the Geological Survey staff, cared for the smaller fossil Foraminifera and forwarded his researches upon the Paleozoic genera. Dr. Josiah Bridge spent the greater part of the year in defense work for the Geological Survey, particularly in directing the field parties searching for bauxite in the Appalachians. During spare moments, however, he continued his studies of Lower Paleozoic gastropods, mainly the peculiar forms known as *Ceratopea*.

Dr. L. W. Stephenson advanced his studies of the Upper Cretaceous faunas of Texas and now, after publication of the fauna of the Navarro

group of Texas, is actively at work on the Woodbine formation. Dr. J. B. Reeside, Jr., in the little time available from his administrative duties, continued his studies of the Upper Mesozoic ammonites. At the close of the year he was occupied with Upper Cretaceous forms from Haiti, the first record of this group in that part of the world. Associated with the ammonites were various rudistids, the peculiar bivalved shells of Mesozoic times, which he has also taken under study. Dr. Ralph Imlay, in his scientific work upon the Museum's collections, specialized upon the Jurassic fossils and stratigraphy of Mexico and the Southern States and on the oil possibilities of these formations in the Gulf region. He paid particular attention to the ammonites, employing them on economic problems in Cuba and the Gulf area.

Researches on Cenozoic invertebrates were conducted, as in the past, by members of the United States Geological Survey. Their efforts when not engaged in defense work were directed to special problems of Tertiary stratigraphy and paleontology. Dr. C. Wythe Cooke, in monographing the Tertiary echinoids of the Atlantic and Gulf Coastal Plains, made frequent use of these fossils in the Springer collection. Dr. Harry S. Ladd had little time for paleontologic work but made important collections of Paleozoic fossils during his studies of the manganese deposits of the Appalachian Valley. Dr. Julia A. Gardner and F. Stearns MacNeil were engaged on the eastern and southern Coastal Plain faunas, while Drs. Ralph W. Stewart and W. F. Woodring were concerned with the western Tertiary faunas. Dr. T. Wayland Vaughan cared for the Cenozoic corals and advanced his research work upon various groups.

In the division of vertebrate paleontology, C. W. Gilmore completed and submitted for publication two short manuscripts entitled, "Osteology of Upper Cretaceous Lizards from Utah, with a Description of a New Species" and "Notes on Recently Mounted Reptile Skeletons in the United States National Museum." A manuscript on "Fossil Lizards of Mongolia" was finished and transmitted to the American Museum of Natural History for publication. A paper entitled "On the Osteology of *Testudo laticunea* Cope from the Oligocene of Wyoming" was nearing completion.

Associate Curator C. L. Gazin prepared a manuscript descriptive of a unique titanothere skull and jaws which were deposited in the Museum by Prof. J. Magruder Sullivan, of Millsaps College. A second manuscript describing Paleocene materials from the Almy formation of Wyoming was also completed and submitted to the Journal of the Washington Academy of Sciences for publication. He also began preparation of a paper on the recently mounted skeleton of *Uintatherium.*

During the past year Dr. Stuart H. Perry, associate in mineralogy, recalled his manuscript on "The Metallography of Meteoritic Iron," for revision but has now submitted it again to the Museum for publication.

Dr. Foshag spent much of the time he was in Washington in conferences and on study of strategic minerals. In September 1941 he completed and submitted to the Office for Production Management a report on the tin mines of Mexico. He also forwarded his mineralogical studies of the California saline minerals. In February he left Washington for an assignment in Mexico for the rest of the year.

Associate Curator E. P. Henderson reports progress on his investigation of meteorites, completing several analyses, and keeping the reference index of falls and finds up to date.

Alfonso Segura Paguaga, of the Museo Nacional de Costa Rica, commenced a year of study in the Museum on October 18, 1941. Museum methods and preparation of vertebrate fossils occupied him in the office, and early in June he left with Mr. Gilmore for practical field experience in Wyoming.

In the entire department, 367 lots of material were received officially for identification and report, some of these amounting to numerous specimens in one lot. These were distributed to the divisions as follows: General geology, 136; mineralogy and petrology, 178; invertebrate paleontology, 29; vertebrate paleontology, 24. Requests for information coming through official channels number 485, likewise distributed as follows: General geology, 197; mineralogy and petrology, 219; invertebrate paleontology, 15; vertebrate paleontology, 54. In all the divisions direct reports are made on specimens brought in and information given to individuals requesting it at any time, so that often this amounts to considerable research and time consumed.

Most of the requests for information and for examination of material in the division of mineralogy and petrology for the year have been made by the many different agencies of the national defense. Here, materials for research purposes were furnished the U. S. Army, U. S. Navy, War Production Board, Bureau of Standards, Bureau of Mines, Bureau of Soils, Fertilizer Investigator at Beltsville, U. S. Geological Survey, and the Geophysical Laboratory. Close to 200 separate requests for examination of specimens or information by individuals who called in person were cared for in the office. A large portion of these was for the examination of gems, and many were for commercial dealers seeking assistance in the identification of their material. By actual average count over several months, 19 letters a week were in answer to inquiries requiring direct replies.

In invertebrate paleontology, the United States Geological Survey and National Park Service were assisted as usual by the several paleon-

tologists. Toward the close of the year Dr. Cooper completed a report on a series of difficult fossils submitted by the Chilean Bureau of Mines and Petroleum.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The distribution of geological specimens was as follows: Gifts, 854 specimens; exchanges, 420 specimens; loans for study, 1,108 specimens; and transfers, 75 specimens.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The estimated total number of specimens in the department is as follows:

Mineralogy and petrology	156,454
Geology, systematic and applied	98,495
Invertebrate paleontology and paleobotany	2,391,295
Vertebrate paleontology	29,794
Total	2,676,038

DEPARTMENT OF ENGINEERING AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

MEASURED by pre-war standards the department of engineering and industries had a moderately successful year. New accessions, numerically, were smaller, and there was a lessening of the prescribed activities looking toward the betterment of the collections. This was due largely to the diversion of the staff's attention to the protection and preservation of the irreplaceable collections under war conditions; to organization work for all possible cooperation in the defense and war efforts; and to preparation for air-raid warden duties within the Institution. The department was further handicapped by the loss of the services for the greater part of the year of four members of the staff, one through detail to the Navy Department, one inducted into the Army, and two through prolonged illnesses.

Early in December, at the request of the Navy Department, Paul E. Garber, associate curator, division of engineering, was detailed to that department to assist the Special Devices Section, Bureau of Aeronautics, in the procurement of urgently needed aviation training material. Early in the next fiscal year Mr. Garber enters furlough status to continue this work as a commissioned officer in the Navy with the rank of lieutenant, senior grade.

The head curator devoted much time and effort, aside from his regular duties, to two important activities delegated to him by the Secretary. In October 1941 he was designated to survey and prepare definite plans for the protection of the large volume of scientific and historical materials contained in the several buildings of the Institution and Museum and to serve as the Smithsonian representative in all pertinent Federal activities concerned with this work. In the succeeding five months plans were developed and put into operation for (1) the protection of materials in place; (2) the selection, segregation, and packing of materials for evacuation; and (3) the protection of buildings against air attack. At the same time, as group warden, Mr. Mitman organized and directed the training and equipping of the entire personnel of the Institution for air-raid defense duties.

On April 1 Mr. Mitman was relieved of group-warden duties in order to assume the chairmanship of a committee appointed by the Secretary to receive suggestions and to consider and recommend courses to promote the usefulness of the Smithsonian Institution in winning the

war. The Smithsonian War Committee held its first meeting on April 3 and met at least once a week thereafter with good results, the details of which are recorded in the Report of the Secretary. This work is still in progress and will be continued under Mr. Mitman's chairmanship for the duration of the war.

ACCESSIONS

Accessions for the year aggregated 182, totaling 2,415 specimens, a decrease of 9 accessions and 273 specimens compared with the previous year. These accessions were distributed as follow: Engineering, 40 (587 specimens); crafts and industries, 76 (1,367 specimens); graphic arts, 66 (461 specimens). Some of the more noteworthy materials are listed under the several divisions as follows:

Engineering.—Scale models of historic aircraft formed the largest group of important objects received. Thompson Products, Inc., Cleveland, generously gave a collection of models of 10 winners of the Thompson Trophy air races; 11 prints of paintings of the winning planes in the air, by Charles Hubbell; and a full-sized reproduction of the trophy. The Thompson Trophy races have been the featured men's free-for-all speed contests of the National Air races for many years. The models represent the Travelair, 1929; Laird, 1930; Gee Bee Super Sportster, 1931; Gee Bee, 1932; Wedell-Williams, 1933; Wedell-Williams Special, 1934; Howard *Mister Mulligan*, 1935; Caudron, 1936; Folkerts Speed King, 1937; and Turner-Laird Special, 1938–39. Among the names of winning pilots famous in the story of aviation who flew these planes are Doug Davis, James Doolittle, James Wedell, and Roscoe Turner. Vought-Sikorsky Aircraft, Stratford, Conn., through Igor I. Sikorsky, presented a model of Sikorsky's 4-motor biplane, *Grand*, of 1913. The *Grand*, built in Russia, is called the first successful 4-motor airplane. Among its numerous records is one made August 2, 1914, when it stayed in the air 1 hour 54 minutes with eight passengers aboard. Mr. Sikorsky also contributed original photographs of his helicopter VS-300. Fred E. Weick presented a model of the Weick W–1A airplane, and the Engineering & Research Corporation, Riverdale, Md., presented one of the Ercoupe. The former is a miniature of the experimental airplane designed and built privately by a group of engineers of the National Advisory Committee for Aeronautics Laboratories to be a plane simple to fly and free from the dangers of stalling and spinning. It is believed to have started the present trend toward tricycle landing gears for airplanes. A second aircraft trophy received is the original Curtiss Marine Flying Trophy, lent by the National Aeronautic Association. This is the famous old seaplane trophy that was competed for under conditions designed to test the "seaworthiness" of seaplanes by requiring a number of landings and

take-offs during the race. It is credited with having promoted the rapid development of able seaplanes.

The Allison Division, General Motors Corporation, Indianapolis, presented a show example of the Allison liquid-cooled internal combustion engine, type V–1710–C, for addition to the division's extensive series of aircraft engines. This engine, which represents one of industry's great contributions to the present war effort, proved a timely and popular item in a special war exhibit of photographs of British aircraft, some of which are powered by Allison engines, in action in Europe and Libya. This exhibit, secured by the Smithsonian War Committee, was received as a loan for the months of May and June 1942 from the British Information Services, New York. An outstanding addition to the division's large propeller collection is a Bastow aluminum propeller presented by Stuart Bastow. As far as an exhaustive research conducted by the Patent Section, United States Department of Justice, revealed, this is the first aluminum propeller made and used in the United States. Mr. Bastow very kindly permitted the propeller to be added to the Museum's collection upon the conclusion of litigation in which it was exhibited by the Government.

In the section of land transportation, the most timely accession was a ¼-ton, 4 x 4, reconnaissance and command automobile, or "Jeep," lent by the War Department and exhibited with a pictorial display of "Auto workers and makers in defense" prepared and presented by the Automobile Manufacturers Association. A transparent, plastic body, 1939 Pontiac automobile lent by the Fisher Body Division, General Motors Corporation, fills the division's need for a late-model car in the collection. It is a car prepared for the New York World's Fair in 1939 and has particular value in that it reveals the engine, chassis arrangement, and construction of the body while preserving the body style. The single railroad relic received is the very interesting inventor's demonstrating model of the Leslie rotary snow plow of about 1885–86. This is the design immediately preceding the simpler plow made by the Leslie Brothers a year or two later and tried successfully on the Union Pacific Railroad. The model was presented by S. Inglis Leslie.

Watercraft models received include a well-executed scale model of the New York Harbor diesel-engine tugboat *Thomas E. Moran*, presented by the Moran Towing & Transportation Co. Capt. James K. Spicer gave six original builder's half or block models of vessels designed and built by his father, Joseph T. Spicer, in the period between 1865 and 1903. Three of these have been identified as the log canoe or brogan *Oyster Creek;* the schooner *Travers Spicer*, built before 1870; and the skipjack *Lillie G. Spicer*, 1903. Original models of Chesapeake Bay types of sailing vessels are rare, and none of these three types was represented by builder's models in the collection.

One of the historically important steps in American industrial progress was the discovery by Frederick W. Taylor and Maunsel White in 1899–1900 of the proper heat-treating process required to produce high-speed tool steel. Their work is represented now in the Museum by an attractive memorial exhibit prepared and presented by the Bethlehem Steel Co. It includes a model of the rough laboratory at Bethlehem, Pa., where the investigations were made; a model of the standard lathe with which cutting tests were made of the tools as Taylor and White produced them; original tools; tools of various earlier and contemporary steels, together with tabulations of comparative cutting tests made with them; and miscellaneous biographical material. Other accessions of note include a model of the spiral coal separator invented by the donor, Frank Pardee; a quantity of Pyrex and Vicor brands of glass in the form of housewares, laboratory and industrial glass, and Christmas tree ornaments, presented by the Corning Glass Works; and a group of transparent display photographs of operations in the production of zinc from the ore, donated by the New Jersey Zinc Co.

With the consent of interested parties, the material contained in boxes deposited in the care of the Smithsonian Institution by Alexander Graham Bell in 1880 and 1881 was transferred to the division of engineering. Included are several photophone transmitters, selenium cell elements of receivers, an electrotype phonogram or record, and a graphophone equipped with a reproducing element designed to reproduce sound through the medium of a jet of air without mechanical contact with the record. Notes, drawings, and laboratory notebooks, describing the experiments made with this material by Chichester A. Bell and Sumner Tainter, are included.

The important work of Franz X. Wagner and John T. Underwood in designing and introducing the visible-writing typewriter of the present form is now represented in the collections for the first time by machines presented to the Museum by the Underwood-Elliott Fisher Co. One of these is of the first model of the "Underwood" manufactured by the Wagner Typewriter Co., in 1897. A single-key action made up of original parts illustrates the simple and successful action designed by Wagner.

Crafts and industries.—Of the 1,367 specimens cataloged in the division, 102 related to textiles; 848 to woods and wood technology; 208 to chemical industries; 28 to agricultural industries, and 181 to medicine and public health. Noteworthy of mention among these are the following:

An original A-model Northrop loom presented by the Draper Corporation. The invention and introduction of this strictly American product in 1895 revolutionized the manufacture of cotton goods, particularly in the southern mills, and reduced by at least 25 percent the entire labor cost in a mill. This particular loom is one of an order

built in 1895 for the Gaffney Manufacturing Co., which during the many years of its use in a mill in South Carolina had been changed by the addition of later improvements. All these later additions, however, were removed and exact duplicates of the original parts installed in their places, so that the loom is now exactly the same as an original A-model Northrop loom. It has been equipped with cotton warp and operated a sufficient length of time to start the cloth around the cloth roll. Two cloth-cutting machines and a hook-and-eye machine were contributed to the Museum's collection of implements connected with the garment industry. The electrically driven machines used for cutting simultaneously many plies of cloth, one using a rotary knife and the other a reciprocating straight knife, were received from the Wolf Machine Co., while from Miss Caroline Marine Ford was received the original hook-and-eye machine patented by her father, Jeremiah T. Ford, on March 7, 1871. This machine automatically shapes wire, fed from two reels, into the form of hooks and eyes.

The Cotton-Textile Institute contributed, as in former years, specimens of cotton fabrics selected by a committee of experts as the most representative materials for the fall and winter seasons of 1941–42, and for the spring and summer seasons of 1942. Fabrics of silk and rayon manufactured particularly to meet wartime needs were presented by William Skinner & Sons. These include viscose rayon satins for the tunic and overcoat linings of army uniforms; a heavy rayon, twilled-face, cotton-back special fabric used as uniform material for the First Parachute Division of the United States Army; and two types of all silk parachute fabrics, one the escape parachute cloth or canopy cloth, the other a thin, light-weight fabric for flare parachutes. Interesting accessions enhancing the collection of old time needlework and textile handicrafts included hand-embroidered infant's garments, an embroidered crepe shawl, and a cotton patchwork quilt from the estate of Mary E. McCrea, through David T. McCrea. From Miss Mary E. Dean came a hand-embroidered infant's dress and specimens of figured silk fabrics of foreign manufacture. Mrs. Myrtle Mallette presented a fine cotton quilt appliqued in "Whig Rose" pattern and quilted in "Princess Feather" and diagonal lines with the appliqued work outlined in quilting, which shows effectively on the plain reverse side. From Miss Daisy Joseph there came a century-old appliqued cotton "political" quilt top, commemorating the William Henry Harrison presidential campaign of 1840 (Tippecanoe and Tyler Too) and showing the "Log Cabin" and "Cider Barrel" designs as the central motif.

The division received for its agricultural industries section, by transfer from the United States Department of Agriculture, 11 old plows that had been collected by the department and exhibited at

the World's Columbian Exposition in Chicago in 1893. Most of these old implements have authentic data as to origin, ownership, and use, having been presented to the Government by direct descendants of the original owners. Six of them were made before 1825. The N. Auth Provision Co. gave to the Museum a set of nickel-plated butcher's tools, originally presented in 1872 to a Washington butcher, William Henry Harrison Hoover, by his post of the Grand Army of the Republic as a tribute to his ability and popularity.

The most important addition to the collection of authentic woods was a set of 787 wood specimens collected with herbarium material by or under the direction of B. A. Krukoff in Brazilian Amazonia during 1931–33 and received as an exchange from the New York State College of Forestry. This set of specimens supplements the woods collected by Mr. Krukoff during 1934–35 in another locality of the same region, which the National Museum purchased in 1937. Joseph L. Stearns contributed 49 specimens of woods, accompanied by herbarium material, which he collected mostly in the southeastern United States. The set includes a specimen of *Leitneria floridana*, the lightest wood found in the United States. A specimen of Malayan elder from Saigon, French Indo-China, believed to be the lightest wood known, and used to make the pith helmets so necessary in tropical countries, was contributed by the George D. Emery Co.

Two important educational exhibits were received by the section of chemical industries. One, entitled "The Manufacture and Uses of Industrial Alcohol," was prepared by U. S. Industrial Chemicals, Inc. and shows, through the media of dioramas, (1) the source of the raw material, byproduct molasses from cane-sugar manufacture; (2) the fermentation room of an alcohol plant; and (3) the tall fractionating columns used in the distillation process. Various uses of the products are shown by colored photographs. This exhibit brings out the relation between the production of alcohol, now needed in large quantities for the manufacture of smokeless powder, and the sugar industry. The second exhibit relates to the plastics industry. Colored transparencies showing sources of the raw materials as well as process operations, such as injection and compression molding, coating, etc., and specimens of the intermediate and finished products are used, with flow sheets, to illustrate the manufacture of plastic products from phenolic, urea, polystyrene, alkyd, and vinyl synthetic resins and also from cellulose acetate. There is also included an assortment of articles showing various applications of the plastics to use. The exhibit was designed by the Bakelite Corporation to show both its own products and those of the Carbide and Carbon Chemicals Corporation. These organizations are units of the Union Carbide and Carbon Corporation. Several specimens indicative of the

importance of rubber and plastics to the war effort were received during the year. Outstanding examples are a bullet-sealing fuel tank for military airplanes, from the B. F. Goodrich Co.; one each of the regulation army service and army training gas masks, from the Firestone Tire & Rubber Co.; a nose section for the Hudson bomber, made of transparent acrylic resin, from Rohm & Haas Co.; and a large collection of miscellaneous articles from Modern Plastics Magazine, through Charles A. Breskin, publisher, illustrating plastics used in war equipment and to replace scarce metals. The United States Rubber Co. presented the last white-sidewall automobile tire made by this company before the order of the Priorities Division, Office of Production Management, prohibiting further manufacture of this type of tire, went into effect at midnight, August 23, 1941.

The most valuable object added to the medical exhibits was the first Emerson iron lung, completed in 1931, and used for several years to produce artificial respiration. This respirator was presented by John Haven Emerson. Dr. Emil H. Grubbe contributed five early X-ray tubes that he and others invented; also original letters pertaining to the early use of X-rays for the treatment of disease. Other accessions of note were: Two old medical X-ray tubes and one "Rachel's Red String," donated by Dr. and Mrs. J. A. Saffir; four ancient Egyptian medicine bottles and a so-called "Boyd's Battery," received as gifts from Milo Elson Emmerson; and a bronze statuette of Dr. A. T. Still, the founder of osteopathy, presented by Ray P. Gardner.

Three valuable and timely exhibits were added to the section of pharmacy. The first was presented by Eli Lilly & Co. and shows how pills and tablets are coated to resist stomach action and to release their medical contents in the intestines. The second exhibit was donated by the Winthrop Chemical Co. It illustrates in a popular manner the sources and functions of the more important vitamins. The third, consisting of atom models presented by the Fisher Scientific Co. and medicines donated by the Ciba Pharmaceutical Products, Inc., is entitled "The Family Tree of the Sulfa Drugs." Milo Elson Emmerson contributed a blue glass bottle of early American manufacture, and Parke, Davis & Co. presented a photograph of a section of its pharmaceutical laboratory.

The Philadelphia Child Health Society donated food value charts, while the Metropolitan Life Insurance Co., the American Social Hygiene Association, and the Society for Visual Education contributed educational films for use in the automatic delineascope of the section of public health.

Crude drugs and pharmaceutical preparations for the section of materia medica were presented by Parke, Davis & Co., Dodge & Olcott Co., S. B. Penick & Co., and Allaire, Woodward & Co.

Graphic arts.—Of the 66 accessions received and cataloged, 38½ (366 specimens) were assigned to graphic arts and 27½ (95 specimens) to photography.

The most noteworthy accession in graphic arts was the gift of 183 Currier and Ives prints previously lent to the division by Miss Adele S. Colgate. This accession was reported and described briefly in the report for 1941. In addition Miss Colgate presented an additional large folio Currier and Ives print of the running horse "Highlander" and two drawings by Louis Maurer, a Currier and Ives artist. Examples of two methods of making pictures, hitherto not represented in the collections, were received from two sources. One method consists in dropping selected colors of oil paint upon a surface of water, manipulating the colors, and then laying a sheet of paper upon the floating oil paint and transferring the colors from the water surface to the paper. Remarkable results, with no two prints alike, are obtained. This was the work of Wilson Irvine, A. N. A. (1868–1936), the examples being presented by Jan and Ted Irvine through Winfield Scott Clime. The second method is similar in some respects and consists in "spreading a thin film of the desired colors in oil evenly over the surface of water in a suitable container, and when so spread out, skimming the film off with a card. Various manipulations of the card will bring various results, as will the uses of various pigments, oils, and solvents." Eleven specimens made in this manner were presented by the maker, Henry W. Bagley, Stockton, Calif.

For a number of years the division has had on display a comprehensive exhibit showing the steps in the printing of a newspaper. The material for this exhibit was largely donated by the Washington Evening Star Newspaper Co. With the cooperation of this organization the exhibit was entirely renovated by the substitution of 23 new specimens to replace the obsolete ones. Two old hornbooks were added to the small collection of seven specimens previously held in the division. These were lent by Dr. Riley D. Moore. An early style of mechanical pencil with disappearing leads, period of 1850–60, was accessioned during the year, as a gift of Miss Bertha Chinn. A large number of prints were added to the division's extensive collection. These included 62 intaglio prints, drypoints by various well-known artists, and the entire series of 54 etchings of the construction and completion of the New York World's Fair, 1939–40, received from the official etcher, Gordon W. Gilkey.

The accessions received by the section of photography were largely gifts of equipment that, when added to the existing collection, provide further details of the visual record of the developments in photography. For example, Mrs. W. C. Welden presented a "Zoetrope" or "Wheel of Life" and 32 colored strips of pictures used with this instrument.

The Zoetrope was patented by Milton Bradley in 1867 and consists of a wheel mounted on a vertical axis with vertical slits cut a uniform distance apart around the rim. A colored strip made up of a series of figures each of which shows an advance of action over the preceding one is mounted vertically near the periphery but within the wheel and close to the vertical slits in the rim. When the wheel is spun about its axis the observer with his eyes fixed on the rim sees pictures that seem alive and in motion. The Zoetrope is an important forerunner of modern motion pictures. Lincoln C. Bogue contributed an early kerosene-lamp magic lantern and 21 colored lantern slides; Miss Helen A. Olmsted and John U. Perkins, both of the Museum staff, presented a Poco-C 4 x 5 plate and roll film camera of 1901 and a Pathex 9.5 mm. motion-picture camera of 1921, respectively; and the Brenner Photo Co., Washington, D. C., donated a No. 4 cartridge Kodak Model B 4 x 5 of 1898 as well as a No. 1A Folding Pocket Kodak, model D of 1908. The revived vogue of an old method invented in 1854 of making permanent porcelain or enamel photographs is now represented in the collections by the gift of Harry B. Light of five photographs, some burned in tile and some on enamel.

INSTALLATION AND PRESERVATION OF COLLECTIONS

For approximately half of the year the work of the department consisted largely in carrying forward the long-range plans for the better preservation and accessibility of the study collections, the maintenance and improvement of the exhibition series, and the handling of new material. The entire aeronautical collection was reinstalled under a new and greatly improved exhibition plan following the complete repair and renovation of the aircraft building. Again, with the recent changeover of electrical service from D. C. to A. C. and the consequent elimination of the danger of overloaded lines, it became possible properly to illuminate and make great improvements in a number of important exhibits in several sections of the department. The changeover, too, enabled the department to design more satisfactorily illuminated exhibits, three of which were installed during the forepart of the year.

After the attack on Pearl Harbor and the declaration of war, however, the work of the department changed materially. Tentative plans previously prepared for the protection of the collections under war conditions were put into effect. Collections stored in tower rooms of the building and subject to incendiary bomb fires were removed to basement and other safer areas. Heavy objects, such as the 60-foot Indian war canoe, suspended from roof girders in the exhibition halls were taken down. Specimens selected for evacuation were segregated, listed, and packed in strong wooden boxes and assembled for removal. Because of limited storage space for these boxes, both empty and

packed, portions of the exhibition floors were taken over and converted into storage rooms. By the close of the year about 75 percent of the selected materials, assembled in about 70 boxes and crates, had been packed or made ready for early removal. The conduct of the staff of the department in this emergency is most commendable. Reduced 25 percent in numbers almost from the start by military furloughs and illnesses, they nevertheless proceeded with the emergency tasks; maintained the collections remaining; installed new collections; designed, procured, and arranged special war exhibits; and, out of office hours, prepared and trained for their assigned air-raid defense duties. The head curator is pleased to record this evidence of the staff's loyalty and deep feeling of responsibility for the portions of the national collections committed to their charge.

In addition to the war exhibits mentioned above, the following monthly shows were held:

GRAPHIC ARTS

August: 156 Currier and Ives prints selected from the Miss Adele S. Colgate gift.
October: Silk screen prints by various artists, together with demonstration of the silk screen process by L. Stevens.
November: 57 monotypes by members of the American Monotype Society.
December: 56 etchings and drypoints in black-and-white and in color by William Meyerowitz, of New York City.
January: 35 etchings and drypoints by Mrs. M. L. Osk, of New York City.
February: 33 etchings and drypoints by Gerry Peirce, of Tucson, Ariz.
March: 35 drypoints, aquatints, and soft-ground etchings by Reynold H. Weidener, of Grand Rapids, Mich.
April: 75 prints by members of the Society of Washington Etchers.
May: 36 etchings by Mrs. Bertha H. Dougherty, of Old Lyme, Conn.
June: Etchings and other prints in black-and-white and in color by members of the Chicago Society of Etchers.

PHOTOGRAPHY

September: 100 prints by A. F. Hallowell, of Ardmore, Pa.
October: 30 prints by Elias Goldensky, of Philadelphia, Pa., lent by the American Museum of Photography, Philadelphia.
November: 68 prints by Underwood & Underwood, New York City, showing the use of photography in advertising and illustration.
December: 56 prints by the Camera Club, New York City, one of the oldest and most distinguished camera clubs in the United States.
January: 103 prints by the Metropolitan Camera Club Council, Rockville Centre, N. Y.
February: 85 pictorial prints frcm the American Photographic Publishing Co., Boston, Mass. These prints are the originals of the illustrations in "The American Annual of Photography."
March: 51 prints by the Telephone Camera Clubs, New York City.
March: 246 prints sponsored by the Arlington Camera Club, Arlington, Va.; 114 prints from South American camera clubs; the balance from members of the Arlington Camera Club.

April: 72 portraits of champion dogs by Arthur S. Mawhinney, of New York City.

May: 101 salon prints, from Popular Photography, Chicago. Third annual selection from 40,000 prints submitted.

June: 59 prints by Will Towles, of Bethesda, Md.

INVESTIGATION AND RESEARCH

The staff is engaged constantly in study and investigations in the wide fields of engineering and industrial history, so that the collections may be thoroughly and accurately developed and that the many specific requests for information may be adequately answered. For example, Paul E. Garber, associate curator of engineering, systematically read and collected descriptions and plans of the military aircraft employed in the war. This should prove useful in developing the collections and placing the war developments in aircraft in their proper historical perspective when the conflict ends. Dr. F. L. Lewton, curator of crafts and industries, continued his studies of the mechanical development of the sewing machine and of the work of Samuel Slater, "Father of American Manufactures."

Assistance rendered to Federal agencies and private individuals has never been greater or more varied than this year. The laboratory of the division of engineering and the assistance of the aide and preparator were put at the disposal of the Special Devices Section, Bureau of Aeronautics, Navy Department, for the construction of meteorological teaching aids. Identification of woods was made for many war agencies, including War Production Board; Board of Economic Warfare; Bureau of Ships; Quartermaster General, U. S. Army; Bureau of Customs, Treasury; Soil Conservation, Agriculture. These and other agencies were also aided by supplying information to specific questions; by lending material for study; and by instructing agents. For example, the War Production Board desired data on raw silk, vanilla, spices, cork, and rattan; construction and operation of certain textile machinery; specimens of California redwood bark for study; and instruction service on abrasives. The Quartermaster General was advised on materials for skiis and was furnished samples of Australian woods for study. The Federal Bureau of Investigation desired pictures of a Japanese typewriter, and the Coordinator of Information desired the names of early English and American machine tool inventors for use in a war-production motion-picture film. From private manufacturing organizations came many requests for aid such as information on resin-bonded plywood; substitutes for balsa wood and sources of rattan in the Western Hemisphere. There were received in addition hundreds of requests from visitors as well as correspondents for identifications ranging from buttons, dress fastenings, and patriotic handkerchiefs to thermo-syphon cooling systems for internal combustion engines.

Frank A. Taylor, curator of engineering, visited the plant of the Underwood-Elliott Fisher Co., Hartford, Conn., to examine material offered to the Museum and to study that company's laboratories and museum. He also inspected the historical industrial collections of both the American Steel & Wire Co. and the Worcester Pressed Steel Co. in Worcester, Mass. Paul E. Garber, associate curator in engineering, visited the Fisher Body Division, General Motors Corporation, Detroit, Mich., to examine the plastic body automobile offered to the Museum, and Dr. Wallace E. Duncan, assistant curator in crafts and industries, visited the plant of the U. S. Industrial Alcohol Co., Baltimore, Md., in connection with the educational exhibit being prepared for the Museum by that organization.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Material distributed from the department included specimens, photographs, and prints totaling over 3,500 items. These distributions included an exchange with a school of forestry of 731 wood specimens; the transfer of 67 specimens to other Government bureaus; loans of 493 items to educational institutions for exhibitions, demonstrations and experimental purposes; and a series of over 2,000 specimens relating to the graphic arts arranged in 7 traveling exhibition sets and shown continuously over a nation-wide circuit. During the year, too, 525 copies of drawings and photographs of the Historic American Merchant Marine Survey, preserved in the division of engineering, were made and distributed to private purchasers.

NUMBER OF SPECIMENS UNDER DEPARTMENT

Engineering	17,204
Textiles	15,593
Woods and wood technology	12,951
Chemical industries	22,978
Agricultural industries, including foods	2,239
Medicine and public health	19,364
Graphic arts, including photography	45,904
Total	136,233

DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

THE work of the division of history during the past year included preparations for air-raid emergencies and cooperation with the War Department in connection with special exhibits of war materials in the National Museum and elsewhere, in addition to its usual duties. Two exhibits of civil historical materials were installed by members of the staff in the foyer of the Natural History Building, one in cooperation with the division of ethnology and the other with the National Collection of Fine Arts of the Smithsonian Institution.

Fred Kaske, scientific aide, long in our service, retired in May at his own request.

ACCESSIONS

The total number of specimens received was 1,549 including various objects of much importance. These were contained in 39 separate accessions.

The art material includes a water-color sketch, painted in 1918, by Georges Scott, emblematic of the cordial relations existing between France and the United States, which was presented to the Museum by Miss Alice Eastman.

The military material was increased by the addition of two swords owned during the Civil War by Assistant Adjutant General Septimus Carncross, U. S. Volunteers, presented by Mrs. Maude C. George and Miss Florence Carncross.

For the numismatic collection the Treasury Department forwarded a number of California gold tokens, coins, and examples of the bronze, nickel, and silver coins struck at the Denver, Philadelphia, and San Francisco mints in 1941. The American Numismatic Association deposited 103 recent foreign coins as an addition to the Moritz Wormser Memorial Loan Collection.

The philatelic material was increased by 1,301 specimens, which were transferred from the Post Office Department. Among these are a number of stamps for countries now occupied by Germany, including German stamps overprinted "Luxemburg" for that country, and German issue stamps for Poland. Stamps issued by the Polish Republic from its temporary headquarters in London also were received. Stamps from Italy include one bearing portraits of Hitler and Mussolini. Other interesting items are stamps overprinted "M. E. F." (Middle East Force) by Great Britain for use in territory in Africa until recently dominated by Italy and now under British authority.

INSTALLATION AND PRESERVATION OF COLLECTIONS

As in other departments of the Museum, the division of history packed for evacuation various of its more important treasures. A considerable quantity of the study materials in the laboratory rooms on the second and third floors of the Arts and Industries Building was removed to the ground floor of that building.

Among the special matters in the field of installation the two temporary exhibitions already mentioned held in the foyer of the Natural History Building should be described in more detail. The first of these was installed in October 1941 in two alcoves as a part of a general exhibit relating to the period of the early development of the United States. This division's part of the exhibit included a taffeta dress made about 1750, a brocade dress of about 1784, a muslin dress of about 1812, a silk dress from about 1830, a taffeta dress of 1835, and a taffeta dress made about 1840. On the walls were shown six prints from original paintings by J. L. Gerome Ferris of costumes and vehicles of the eighteenth century, including "The First Sermon at Plymouth," 1621, "Benjamin Franklin's Bookshop," 1745, "The Bell's First Note," 1753, "The Christmas Coach," 1792, "Washington at Christ's Church," 1795, "Summer Days at Mount Vernon," "Christmas Eve at Mount Vernon," 1798, "Stuart Painting Washington's Portrait," and "Independence Square," 1796.

A second alcove devoted to men's costumes displayed three suits of the eighteenth century, four coats of the eighteenth century, a mohair overcoat of the early nineteenth century, two pairs of breeches of the late eighteenth century, and a white satin waistcoat of the late eighteenth century. On the walls of this alcove were shown a series of prints from original paintings by W. L. Taylor depicting costumes and vehicles of the nineteenth century.

In December 1941 a second temporary exhibit was prepared in the same location in connection with the celebration of the Sesquicentennial Anniversary of the Bill of Rights. This special exhibit included facsimiles of the Bill of Rights as approved by the Congress of the United States on September 25, 1789, the Declaration of Independence, and the Constitution of the United States, together with a printed copy of the "Four Freedoms" mentioned by President Roosevelt in his message to Congress on January 6, 1941. Pictures shown included portraits of four American statesmen closely associated with the early history of the Bill of Rights, George Mason, James Madison, Thomas Jefferson, and George Washington; portraits of the Presidents of the United States from 1791 to 1941, and paintings indicating some of the changes in the design of the United States flag during this same period. With these there were placed several costumes of the types worn by American men and women about the

time of the adoption of the Bill of Rights, four rifles of the styles used by the armed militia of the United States from 1776 to 1926, and an American printing press of 1822, which was represented as the greatest single force in connection with the adoption, preservation, interpretation, and enforcement of the Bill of Rights.

Much time was devoted during the past year to the rearrangement of the naval collections installed in the northwest court. Renovation of the wall cases on the north side of this court was completed, and a screen for the installation of paintings representing naval scenes was erected above the cases. A number of large historical military and naval flags were installed with a series of ship models representing United States naval vessels that figured prominently in our history from the time of the Revolution to the present day.

The historical storage collections on the north balcony were removed from the second and third floors in order to eliminate fire hazard in these rooms. Materials were examined critically during this process and work on them continues to place them in better condition as regards arrangement. It was also necessary to remove storage materials from the rooms on the second and third floors of the north and west towers as well as from two long inner galleries of the north balcony. For these collections space was taken on the east and west sides of the arms court.

In the philatelic collections a frame with the title "War and Philately" proved an interesting exhibit for a series of postmarks of Army post offices and defense bases, war slogan cancellations, and other similar materials. Progress was made in routine cataloging in the collections of stamps and postal stationery.

INVESTIGATION AND RESEARCH

Much research work was accomplished during the year by the curator in the field of historical museum technique. He made large additions also to the notes in the files of the division on the subjects of coins, medals, and flags. Data now assembled will serve as a system for historical museum classification when it is finally ready for publication.

The assistant curator, Charles Carey, assembled much information concerning arms and projectiles. The philatelist, Mrs. C. L. Manning, made progress in the classification of the Michel philatelic collection.

The curator was consulted by the Treasury Department in connection with numismatic matters. The assistant curator assisted the Ordnance Bureau of the War Department in the display for civil employees of that Bureau of various types of projectiles. He also cooperated with the War Department in the preparation of a series of traveling military exhibits to be sent by that Department to various parts of the United States. The philatelist aided the staff of the Pan

American Union in connection with philatelic materials for use in the preparation of a "Who's Who on the Postage Stamps of Latin America."

NUMBER OF SPECIMENS UNDER DIVISION

Art	4,912
Costumes	4,316
Domestic	10,854
Military	27,911
Narrative	2,271
Naval	2,729
Numismatic	48,420
Philatelic	409,830
Total	511,243

ACCESSIONS DURING THE FISCAL YEAR 1941–42

(Except when otherwise indicated, the specimens were presented, or were transferred, in accordance with law, by Bureaus of the Government)

ABBOTT FUND, W. L., Smithsonian Institution (collected by Dr. A. Wetmore and M. A. Carriker) : 1,845 skins and 7 skeletons of birds, 2 sets of bird eggs, 49 mollusks, 1 insect, 2 mammals, and 24 fishes; also reptiles from Colombia (159628).

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, Philadelphia, Pa.: (Through Dr. H. A. Pilsbry) 8 mollusks, including paratype from Costa Rica, and 3 topotypes (160519, 161149, 161609) ; (through Henry W. Fowler) 6 fishes (154309, 161393, 161668, exchanges) ; 150 photographs of types of plants (160537, exchange) ; 70 plants from Peru, Bolivia, and Chile (161043, exchange) ; 1 fern from Arizona (161767, exchange).

ACUÑA, Dr. JULIAN, Santiago de las Vegas, Cuba. (See under Estación Experimental Agronómica.)

ADCOCK, Capt. THOMAS A., College Station, Tex.: 2 plants from Texas (160399).

AGRICULTURA, DIRECCIÓN GENERAL DE, San Jacinto, D. F., Mexico: 1 mouse from Loma de Chapultepec, Mexico City, D. F., collected by A. Dampf (162405).

AGRICULTURE, DEPARTMENT OF, Salisbury, Southern Rhodesia: (Through Dr. Rupert W. Jack) A small collection of adult and larval insects from Southern Rhodesia (161871, exchange).

AGRICULTURE, U. S. DEPARTMENT OF: (Through Dr. O. F. Cook) 5 reptiles, 2 crabs, 1 eel, 1 scorpion from Guatemala (161567).

Bureau of Animal Industry, Zoological Division: (Through Prof. O. Wilford Olsen) Approximately 3,670 land and fresh-water shells from Brazoria County, Tex. (161754) ; (through Dr. L. A. Spindler) 1 vial of earthworms from Puerto Rico (145206).

Bureau of Entomology and Plant Quarantine: 163 mollusks; 92 isopods, 2 amphipods, 1 parasitic copepod, 4 shrimps, 1 apus, 1 blind snake, 1 lizard ; 2 insects, type and paratype ; 2 plants (156747, 159287, 160167, 160381, 160608, 160642, 160970, 161481, 161682, 161927, 162279, 162452, 162588, 162923, 163029) ; about 52,000 specimens of miscellaneous insects retained for the collection from various lots received for identification and report, during the fiscal year 1941–1942 (163242) ; (through Dr. Ivan Shiller) 112 plants from Texas (159965) ; (through Dr. W. V. King) 24 adults and 26 slides of mosquitoes (161204).

Forest Service: 34 plants (161075). 1 fern from Arizona (161694) ; plant from Montana (162078).

Bureau of Plant Industry: 11 old wooden plows that were exhibited by the museum of the Department of Agriculture in the U. S. Government Building at the World's Columbian Exposition, Chicago, Ill. 1893 (161555) ; (through Dr. T. H. Kearney) 7 plants from Arizona, and 1 cultivated plant (160928, 161302, 162525) ; (through Dr. F. R. Fosberg) plant from Brazil (162897) ; (through Paul Russell) wood samples of "Bejuco de la Cruz" from Nicaragua (163271) ; (through J. R. Swallen) 48 grasses from China (162379).

Soil Conservation Service: (Through Dr. H. N. Moldenke) 8 grasses from Ohio (163052).

AITKEN, W. W., Drakesville, Iowa: 4 fresh-water jellyfishes (162440).

ALBURTIS, Mrs. SUSAN S., Chevy Chase, Md.: 11 ascidians from Chesapeake Bay, Md. (161386).

ALDRICH, Dr. J. W. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

ALLAIRE, WOODWARD & Co., Peoria, Ill.: A specimen of sliced bulb of squill, U. S. P. (163221).

ALLAN, Dr. JOHN A., Edmonton, Alberta, Canada: Cast of the skull and jaws of the dinosaur *Troodon* (160314).

ALLARD, H. A., Washington, D. C.: 6,000 plants from Virginia and West Virginia (162207).

ALLEN, P. B., Meriden, Conn. (See under Meriden Gravure Co.)

ALLEN, PAUL H., Balboa, Canal Zone: 279 plants from Panama (160594, 160883, 161044, 161049, 161069, 161710, 161889, 162471). (See also under Panama Canal.)

ALLEN, ROBERT P., New York, N. Y.: 5 plankton samples from Florida Bay (157913). (See also under National Audubon Society.)

ALONZO, RAÚL, Habana, Cuba: 24 plants from Oriente, Cuba (162129).

ALVARENGO, LEONIDAS, San Salvador, El Salvador: 1 cocoon of moth (160506).

AMERICAN FORESTRY ASSOCIATION, Washington, D. C.: Original oil painting from which the Association's 1941 Forest Fire Prevention poster stamps were copied (160734, loan).

AMERICAN MONOTYPE SOCIETY, Wolcottville, Ind.: (Through Paul W. Ashby), 57 monotypes, for exhibition during November 1941 (161784, loan).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.: 1 paratype of curled-tailed lizard from Alta Vela Island, Dominican Republic (156574, exchange); 1 cast of a troodont dinosaur skull from the Upper Cretaceous, Hell Creek formation, near Ekataka, Mont. (161108, exchange); 4 moths (161444); 4 paratypes of coral from the Jurassic of Wyoming (162293); 10 rats collected at Villavicencio, Colombia, 1940–41 (162543); (through John T. Nichols) 5 fishes collected by Michael Lerner Expedition of 1939 to Australia and New Zealand (Island of Bali) (160560, exchange); (through Dr. C. M. Bogert) 4 frogs from Oyapock, Oyapock River, Brazil, collected by W. G. Hassler (162505, exchange).

AMERICAN MUSEUM OF PHOTOGRAPHY, Philadelphia, Pa.: 50 portraits by Elias Goldensky, for exhibition October 8 to 31, 1941 (161252, loan).

AMERICAN NUMISMATIC ASSOCIATION, New York, N. Y.: 23 coins of Argentina, Bolivia, China, Czechoslovakia, Greece, Iceland, India, Indo-China, Portugal, and Turkey (160670, loan); (through David M. Bullowa) 16 coins from Bolivia, France, Germany, Guernsey, India, Mozambique, Peru, Slovakia, and St. Thomas and Princes Islands struck during the period 1934–1940 (161684, loan); 12 coins of British Honduras, Estonia, Hong Kong, India, Indo-China, Luxemburg, Peru, Portugal, and Straits Settlements, struck during the period 1920–1937 (161935, loan); 52 coins of Argentina, Austria, Bohemia, Moravia, Bolivia, Brazil, Ceylon, Chile, Costa Rica, Dutch East Indies, France, Germany, India, Jamaica, Latvia, Mauritius, Monaco, Mozambique, Netherlands, Norway, Portugal, Sarawak, Seychelles, Slovakia, Spain, Switzerland, Tunis, and the United States, struck during 1912–1941 (162574, loan).

AMERICAN PHOTOGRAPHIC PUBLISHING CO., Boston, Mass.: 85 pictorial photographs for exhibition during February 1942 (162296, loan).

AMERICAN SOCIAL HYGIENE ASSOCIATION, INC., New York, N. Y.: 1 strip film entitled "The Gift of Life," for use in the automatic delineascope (162616).

AMERICAN WRITING PAPER CORPORATION, Holyoke, Mass.: (Through Shel Bradley) 1 silk-stencil print, "Winter Landscape," by Clarence P. Hornung, produced by Phillips Posters, Inc. (161607).

AMOS, WALTER, Winchester, Va.: Specimen of zinc ore from 9 miles west of New Market, Rockingham County, Va. (161203).

ANCÍZAR-SORDO, Dr. JORGE. (See under Laboratorio Químico Nacional de Análisis e Investigación.)

ANDREWS, ED B., Estes Park, Colo.: 2 beetles, paratypes (161148).

ANDREWS, H. L. (See under James Zetek.)

ANONYMOUS: (Through Leila Mechlin) 2 prints; aquatint, "Spring," by Doel Reed; etching, "Sunbathers on the Roof," by John Sloan (162181); 4 bird skins and 2 bird skeletons (162385, found in collection without number); 2 bird skins and 27 bird skeletons (163263, found in collection without number); coral bead necklace with silver coin and figurine pendants (163269).

ARIZONA, UNIVERSITY OF, Tucson, Ariz.: Plant from Arizona (160349, exchange); 1 plant from California (161648, exchange).

ARLINGTON CAMERA CLUB, Arlington, Va.: 246 pictorial photographs for special exhibition during March 1942 (162498, loan).

ASCHEMEIER, C. R., Washington, D. C.: 3 turtles from Sandy Hood, Md. (162849); 33 bird skins (162883, exchange).

ASHBY, PAUL W., Wolcottville, Ind. (See under American Monotype Society.)

ASHLEY, J. H. (See under Fresnillo Co.)

ATLANTIC BIOLOGICAL STATION, St. Andrews, New Brunswick: (Through Dr. A. H. Leim) Approximately 40 specimens of amphipods (160685); (through Dr. A. W. H. Needler) 20 amphipods from Pugg Lake, Shelburne County, Nova Scotia (161771).

ATWATER, Rev. DAVID T., Brooklyn, N. Y.: 3 land shells from Admiralty Islands and Philippines (160630, exchange).

AUSTRALIAN BOTANIC GARDENS, Sydney, New South Wales: 70 grasses from Australia (160738, exchange).

AUTH PROVISION CO., Washington, D. C.: A set of butcher's nickel-plated tools, which was presented to William Henry Harrison Hoover in 1872 by his local post of the Grand Army of the Republic (130572).

AUTOMOBILE MANUFACTURERS ASSOCIATION, Detroit, Mich.: (Through James Cope) 2 large panels of photographs illustrating defense work in the automobile industry (160441).

BAGLEY, HENRY N., Stockton, Calif.: 11 small paintings in water-oil (162221).

BAHOVEC, FRED, Baranof, Alaska: 1 crab, 4 mollusks, 1 hydroid, 1 barnacle, 1 brachiopod, 2 ophiurans, 1 alcyonarian (160461, 161168, 162441).

BAILEY, ALFRED M. (See under Colorado Museum of Natural History.)

BAILEY, E. W. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

BAIN, Mrs. H. FOSTER, Washington, D. C.: 1 glass sponge from Philippines (160688, loan).

BAKELITE CORPORATION, New York, N. Y.: An exhibit of 3 panels, containing lighted transparencies, flowsheet diagrams, specimens of intermediate and finished products, and a colored photographic enlargement, which are arranged to illustrate the manufacture and application of plastic products made from cellulose acetate and from phenolic, urea, alkyd, styrene, and vinyl synthetic resins (162613).

BAKER, C. H., Indianapolis, Ind.: Hopkins & Allen revolver patented in 1871 and an original letter written by Arnold Allard, at Frenois, France, March 6, 1841, to his son, Jean Allard, at Wilmington, Del. (161904).

BAKER, ROGER C., Trenton, N. J.: 30 Devonian brachiopods from the black shale of Ohio (161470).

BALL, W. HOWARD, Washington, D. C.: 2 copperhead snakes from Virginia (163137).

BALLS, EDWARD K., Arlington, Va.: 103 plants from Virginia and 195 plants from New York State (161281, 161282).

BALTIMORE MUSEUM OF ART, Baltimore, Md.: A collection of hunting and fishing implements from the Alaskan Eskimo (162535, exchange).

BANKS, NATHAN. (See under Harvard University, Museum of Comparative Zoology.)

BARBER, CHARLES T. (See under Katherine H. Noyes.)

BARBER, H. S. (See under Estate of Dr. Eugene Amandus Schwarz.)

BARBOUR, Dr. THOMAS. (See under Harvard University, Museum of Comparative Zoology.)

BARKER, Dr. ALBERT W., Moylan, Pa.: 2 lithographic crayons, number X, formula invented by Dr. Barker (160629).

BARNES, CLAUDE T., Salt Lake City, Utah: 1 plant; 1 mollusk from Lambs Canyon, Utah, 6,500 feet elevation (161014, 161170).

BARNES, R. M., Lacon, Ill.: 14 specimens of Lepidoptera, representing as many species (159945).

BARNEY, Daughters of ALICE PIKE, Washington, D. C.: Collection of antique furniture, tapestries, porcelain, and silver (12 specimens) (162074, loan); collection of miscellaneous antique art objects and antiquarian furnishings now in National Museum, in part as an unaccessioned deposit and in part included in previous loan accessions from Mrs. Alice Pike Barney (162081).

BARRETTO, Dr. MAURO P., São Paulo, Brazil: 8 slides of 6 species of flies, all paratypes (162835).

BARTHOLOMEW, ELIZABETH ANN. (See under West Virginia University.)

BARTLETT, Dr. H. H., Ann Arbor, Mich.: 40 ferns from Panama (161366).

BARTLETT, Capt. R. A., New York, N. Y.: 81 lichens and mosses from Labrador and Greenland (161834).

BARTLEY, FLOYD, Circleville, Ohio: 60 plants from Ohio (161434).

BARTOS, W. A. (See under President Franklin D. Roosevelt.)

BARTSCH, Dr. PAUL, Washington, D. C.: Approximately 600 fresh-water and marine shells from Quebec, Canada, and Pennsylvania (160992).

BASTOW, STUART, Pawtucket, R. I.: Aluminum aeronautical propeller that, as far as an exhaustive research conducted by the Patent Section of the U. S. Department of Justice revealed, is the first aluminum aeronautical propeller made and used in the United States (163200).

BATTLE, OSCAR, Jr., Columbus, Ga.: 5 plants from Georgia (160673).

BAUER, HENRY, Lawrence, Mass.: Woven picture, "The Venus of Milo," made on a 400-hook Jacquard loom with rayon yarns (161769).

BAYER, TED, Riviera, Fla.: 30 echinoderms and 1 marine mollusk (161081, 162463).

BAYLOR UNIVERSITY, Waco, Tex., (Through Dr. Leo T. Murray) 32 insects (159178, 161059).

BEATTY, HARRY A., Christiansted, St. Croix, Virgin Islands: About 155 miscellaneous insects collected on Tortola, British V. I., 9 lots isopods, 1 lot (6+) of oligochaetes; about 500 miscellaneous insects collected in the Virgin Islands; 53 plants from St. Croix, V. I. (159958, 161551, 162937).

BEATTY, V. L.: (See under Mrs. Ida M. Tichenor.)

BEERBOWER, FRED V., Kingwood, W. Va.: 2 vials of reared beetle material (160918).

BEERS, L. E., Needles, Calif.: A specimen with fossil tuberous root stalk of water plant from Eagle Mountain, near Needles, Calif. (162977).

BELL, Dr. W. CHARLES, Austin, Tex.: 1 crinoid from Bainbridge formation of southwestern Missouri (161473).

BELL, Mrs. WILLIAM H., Washington, D. C.: A collection of miscellaneous ethnological objects from the Tule Indians of the San Blas coast, southeastern Panama and from other tribes of Guatemala and elsewhere (62 specimens) (162175).

BENESH, BERNARD, North Chicago, Ill.: 86 insects (161308).

BEQUAERT, Dr. JOSEPH, Harvard University, Boston, Mass,: 2 paratypes of Hymenoptera; 5 Hymenoptera, representing 4 species, 3 of which are represented by paratypes (161147), (162643, exchange). (See also under Harvard University, Museum of Comparative Zoology.)

BERMAN, Dr. HARRY. (See under Harvard University, Department of Mineralogy and Petrology.)

BERMÚDEZ G., LUIS A., Cali, Valle, Colombia: 12 plants from Colombia (160593).

BERRY, DEAN F., Orlando, Fla.: 10 Lepidoptera (162493, exchange).

BERRY, G. A. (See under Juan M. Bosq.)

BERRY, R. S. (See under Col. Harry B. Light.)

BETHLEHEM STEEL Co., Bethlehem, Pa. (Through S. H. Yorks): An exhibit on work of Frederick W. Taylor and the invention of the Taylor-White high-speed tool steel at the Bethlehem Steel Co., 1899–1900 (162825).

BIER, F. F., Washington, D. C.: A section of the left lower jaw of a whalebone whale from the Calvert formation of the Miocene at Plumpoint, Calvert County, Md. (161919).

BIRD, HENRY, Rye, N. Y.: 3 Lepidoptera, 2 adults and pupa (160683).

BIRKHOLZ, CLIFFORD, Battle Creek, Mich.: 49 mollusks from Michigan and Indiana (162420).

BISHOPP, Dr. F. C. (See under G. Allen Mail.)

BJORKMAN, JOHN G., Pasadena Calif.: 1 linoleum print by donor entitled "The Awakening of the Goddess of Liberty and the Destruction of Nazism" (161065); 1 engraved linoleum block and a photostatic print from it (162142).

BLACK, DON, Camp Hill, Pa.: 1 bat from Cleversburg Cave, Shippensburg, Cumberland County, Pa. (161225).

BLACK, RALEIGH A., Mont Albert, Victoria: 33 grasses from Australia (161365, exchange).

BLAISDELL, Dr. FRANK E., Sr., San Francisco, Calif.: 10 beetles (161790).

BLAKE, Mrs. DORIS H. (See under Harvard University Museum of Comparative Zoology and C. A. Frost.)

BLAKE, Dr. S. F., Arlington, Va.: 634 fragmentary specimens (mainly types) of plants in European herbaria, and 783 photographs of similar material (160587, 161451, 161647, 161873, 162037, 162208); 5 bones of fossil fish from the Pleistocene at Wailes Bluff, Md. (161185).

BLAKE, Prof. S. T. (See under University of Queensland.)

BLANCH, Lt. JOSEPH, Coco Solo, Canal Zone: 9 shrimps from Cocos Island (160746).

BLEIFUS, CARL J., Hollister, Calif.: 7 specimens of fossil wood with *Teredo* borings, from the Etchegoin formation of California (162581).

BLOCH, DON, Washington, D. C.: 60 plants (marine algae) from New England (160440).

BOGERT, Dr. C. M. (See under American Museum of Natural History.)

BOGUE, LINCOLN C., St. Petersburg, Fla.: 1 magic lantern and 21 slides in color (decalcomania) (161563).

BOLES, THOMAS. (See under Department of the Interior, National Park Service.)

BORMANN, Mrs. RALPH, Long Beach, Calif. 4 mollusks (161722).

BOSQ, JUAN M., Buenos Aires, Argentina: (Through G. A. Berry) 26 South American weevils, representing 14 species (160977, exchange).

BOTTIMER, L. J., Hyattsville, Md.: 130 specimens of mollusks from Beltsville, Md. (161429, 161765).

BOURGEOIS, MARIE E., Mixcoac, D. F., Mexico: 99 Mexican shells (162048).

BOWER, WARD T. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

BOWHAY, ARNOLD R. (See under Caroline Marine Ford.)

BOX, WILLIAM J., Daisetta, Tex.: 1 wood rat (159785).

BOYER, MARGARET E., Yorktown Village, Md.: 1 olive-backed thrush (161223).

BRACELIN, Mrs. H. P., Berkeley, Calif.: 22 plants from South America (160887, 162466).

BRADLEY, SHEL. (See under American Writing Paper Corp.)

BRAINERD, EVELINE W., Haddam, Conn.: 3 engraved wood blocks and 1 electrotype from a wood block (160445).

BRANDHORST, C. T., Seward, Nebr.: 2 flies (162125).

BRANIN, M. LELYN, Newark, Del.: 3 salamanders from near Newark, Del. (161131).

BRAVO, H. MARGARITA, Chapultepec, Mexico: Cotype of parasitic worm (162097).

BRENCKLE, Dr. J. F., Mellette, S. Dak.: 43 grasses from Western United States; 20 plants (161981, 162128).

BRENNER PHOTOGRAPH CO., Washington, D. C.: 1 cartridge Kodak No. 4, Model E, 4 x 5, made about 1898; A No. 1–A folding pocket Kodak, Model D, made about 1908 (160990, 162715).

BRERETON, ESTELLE J., Washington, D. C.: Rectangular enameled snuffbox with inscribed calendar for the year 1759, made at Bilston, Staffordshire, England, and long in the possession of the donor's grandmother (162802).

BRESKIN, CHARLES A. (See under Modern Plastics Magazine.)

BRIDGE, Dr. JOSIAH, Takoma Park, Md.: 1 specimen of halloysite in bauxite from the Rock Run district, Cherokee County, Ala. (161842).

BRIDWELL, J. C., Washington, D. C.: 1 mollusk from the Formica Insectary, U. S. Department of Agriculture, Vienna, Va. (162723).

BRIGHAM YOUNG UNIVERSITY, Provo, Utah: 14 ants, type and 13 paratypes; (through Dr. Vasco M. Tanner) 1 beetle, paratype (163243).

BRIMLEY, C. S., Raleigh, N. C.: 7 specimens of flies representing 7 species, 4 of which are represented by holotypes (160994).

BRISCOE, Prof. M. S., Harpers Ferry, W. Va.: 5 mollusks from Staunton, Va. (160699).

BRITISH GOVERNMENT, *British Information Services*, New York, N. Y.: (Through Jan Juta) "British Aircraft," a series of 81 photographic enlargements of British aircraft in action in Europe and Libya (163074, loan).

BROADBENT, Mrs. H. M., Chevy Chase, Md.: Eskimo net for catching seals, from vicinity of Point Barrow, Alaska; large carved wooden haddock hook, Tlingit, British Columbia or Alaska, and a netting shuttle with spruce root cord, Northwest Coast tribes, British Columbia or Alaska, collected by Capt. H. M. Broadbent on one of the first cruises of the Coast Guard Cutter *Bear* about 1895 (160908).

BROCK, M. E. (See under K. E. Herde.)

BRONTE, Lt. Comdr. EMORY B., San Francisco, Calif.: A pair of goggles worn by donor on the Oakland, Calif., to Hawaii flight, July 14–15, 1927 (163199).

BROOKINGS, Mrs. MARTHA N., Alexandria, Va.: Two Paisley, block-printed barege shawls, period of 1846, which were stocked in store conducted from 1855 to 1870 in Rockport, Mass., by Reuben Brooks, Sr. and Jr., grandfather and father, respectively, of the donor (161349).

BROOKLYN BOTANIC GARDEN, Brooklyn, N. Y.: Cultivated plant; specimen of plant (*Smilax*) from Guayaquil (161159, 161205, exchange).

BROOKS, A. B., Wheeling, W. Va.: 3 bats; 2 bats collected in Davis Cave, near Woodsfield, Monroe County, Ohio (162193, 162560).

BROOKS, A. R. (See under Canadian Government Department of Agriculture.)

BROOKS, Dr. STANLEY T., Pittsburgh, Pa.: 7 fresh-water medusae (161100).

BROWER, A. E., Augusta, Maine: 67 Lepidoptera, representing 26 species (160386); 41 pinned specimens and 2 slides, representing 17 species of named Lepidoptera (162518, exchange).

BROWN, BEN H. (See under Abraham George Gruich.)

BROWN, GEORGE, Washington, D. C.: Skull and jaws of a domestic pig from Montgomery County, Md. (160402).

BROWN, Dr. H. H., Barbados, B. W. I.: Collection of sponges from the Bahamas (161886).

BROWN, W. J. (See under Canadian Government Department of Agriculture.)

BRUES, Prof. C. T., Cambridge, Mass.: (Through Dr. Richard Dow) 1 wasp, paratype of a new species (161251).

BRUNER, S. C., Habana, Cuba: 1 wasp, allotype of a new species (162398).

BULLOCK, D. S., Angol, Chile: 50 plus miscellaneous insects and 45 freshwater mollusks from Malloco River, collected in Chile (162199).

BULLOWA, DAVID M. (See under American Numismatic Association.)

BUNTING, Mrs. JOSEPH S. (See under Baroness Emily von Hiller.)

BURANEK, ALFRED, Provo, Utah: 1 specimen of pyrite pseudomorph from Utah (158770, exchange); 1 gypsum crystal from Utah (161172); specimens of celestite, fluorite, and pickingerite from Utah (162561, exchange).

BURCH, TOM, Redondo Beach, Calif.: Paratype of mollusk from off Redondo Beach, Calif. (161753).

BUREN, WILLIAM F., Ames, Iowa: 28 ants, all paratypes (161625); 157 ants, representing 48 species, 8 of which were previously unrepresented in the collections of the National Museum (162412, exchange).

BURGER, JOSEPH, and PETE SALTAS, Bingham Canyon, Utah: (Through Dr. Russell G. Frazier) Willow figurine of quadruped from a cave overlooking Marble Canyon from west side of Colorado River, Coconino County, Ariz. (155718).

BURGESS, Dr. C. M., Honolulu, Hawaii: (Through D. Thaanum) 2 mollusks from Waikiki (161048).

BURRELL, Mrs. JAMES G., New York, N. Y.: Collection of 39 hunting and skinning knives, handmade and manufactured, of various origins, and 32 crook-handled knives of curious designs, 71 specimens (162489).

BURT, Prof. CHARLES E., Winfield, Kans.: A small collection of insects and larvae of a spadefoot toad from Kansas; 12 mollusks from Stock Island, Florida Keys; 500 amphipods, 4 earthworms (160060, 160523, 161078).

BUSHNELL, Mrs. DAVID I.: (See under David I. Bushnell, Jr.)

BUSHNELL, DAVID I., Jr. (deceased): (Through Mrs. David I. Bushnell, Washington, D. C.) Sword and a pair of epaulets (161222).

BUSWELL, W. M., Coral Gables, Fla.: 2 ferns from Florida (162084, 162523).

BUTLER UNIVERSITY, Indianapolis, Ind.: (Through Prof. J. E. Potzger) 20 grasses mostly from Wisconsin (162871).

CABALLERO y C., Prof. EDUARDO, Casa del Lago, Chapultepec, Mexico: Cotype of trematode; 2 lots of trematodes (160929, 161547).

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 8 plants from Western United States (161917, exchange).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.:

Department of Botany: 218 plants from South America (161118, 162367, 163246, exchanges); 227 algae (160590, exchange); 386 plants from Western United States (162436, exchange).

Department of Geological Sciences: (Through Prof. A. Pabst) 1 specimen of cryptocrystalline pyrite from Leviathan Mine, Alpine County, and 1 specimen of diadochite from New Idria Mine, San Benito County, Calif. (159921, exchange).

Museum of Paleontology: (Through Prof. Bruce L. Clark) 103 casts of molluscan types from the Cenozoic of California (161725); (through Dr. J. Wyatt Durham) 24 fossil corals from west coast of America (162212).

Museum of Vertebrate Zoology: (Through Dr. Alden H. Miller) 10 birds from Oregon (161768); 1 skeleton of auklet (162558, exchange).

CALVERT, EARL L., San Gabriel, Calif.: 1 specimen of wulfenite coated with vanadinite from Los Lamentos, Santa Eulalia, Mexico (162307).

CAMERA CLUB, THE, New York, N. Y.: 56 pictorial photographs for exhibition during December 1941 (161763, loan).

CAMMERER, Mrs. ARNO B., Washington, D. C.: 15 ears of Navaho corn collected by donor and the late Dr. Arno B. Cammerer in Mesa Verde National Park, Colo. (163267).

CANADIAN GOVERNMENT, Ottawa, Canada:

Department of Agriculture, Entomological Branch: (Through A. R. Brooks) 7 flies representing 7 species, all paratypes (161226, exchange); (through W. J. Brown) 72 beetles, representing 15 species, 5 of which are represented by 14 paratypes (161579, exchange); (through G. Stuart Walley) 20 [reared] insects (161879, exchange); (through Dr. J. McDunnough) 6 Lepidoptera, all paratypes (162801, exchange).

Royal Ontario Museum of Paleontology: Fragments of types of 8 species of Silurian fossils from Ontario (163125, exchange); (through Dr. Madeleine A. Fritz) fragments of the types of 17 spe-

Royal Ontario Museum of Paleontology—Continued.
cies of Devonian fossils (162724, exchange).

CANFIELD FUND, Smithsonian Institution: 5 minerals from Bolivia, including cassiterite, bismuthinite, etc. (160481); selections of 43 mineral specimens from the Runge collection (160947); 1 specimen of andorite and 4 wolframites from Bolivia, and 1 graftonite from New Hampshire (160982).

CÁRDENAS, Dr. MARTÍN, Cochabamba, Bolivia: 60 fresh-water Pleistocene mollusks and 1 plant from Bolivia (160456, 162467).

CARNCROSS, FLORENCE. (See under Mrs. Maude C. George.)

CARNEGIE INSTITUTION OF WASHINGTON. Stanford University, Calif.: (Through Dr. David D. Keck) 101 plants (160988).

CARNEGIE MUSEUM, Pittsburgh, Pa.: (Through J. Kenneth Doutt) Lower jaw of whale, collected at Guafa, off the coast of Chile (161897).

CARRIKER, M. A., Jr., Beachwood, N. J.: 1 lot of cassiterite specimens from Maragua district, Bolivia (161202). (See also under W. L. Abbott Fund.)

CARSON, J. B., Sierra Blanca, Tex.: A small collection of feldspar crystals from north foot of the mountain just south of Sierra Blanca, Tex. (161825).

CARTY, ALTON B., Washington, D. C.: 9 specimens of spiral wire and loose-leaf bindings from various sources (161362).

CARVALHO, Dr. JOSE CANDIDO M., Ames, Iowa: Type of a species of Gordiacea (161114).

CASEY, Mrs. LAURA WELSH, Washington, D. C.: A carved wooden headrest, or pillow, originally presented by a Zulu chief to Col. T. L. Casey, during the Transit-of-Venus Expedition of 1882; also 12 spoons, consisting of 5 early nineteenth century silver tablespoons bearing the mark C. Bard & Son, 1 early American silver tablespoon bearing the makers' mark Stockman & Pepper, and 6 early American silver tablespoons bearing the maker's mark, I. M. Mullin, reputedly made of Spanish dollars after the Mexican War, inherited by donor from her maternal great-grandmother, Sarah Gilbert, of Philadelphia, Pa. (160631).

CASTEEL, Dr. F. A., Washington, D. C.: Skull with lower jaw (female) from the Yucca House ruin, southwestern Colorado (161939).

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C.: (Through Rev. Father Hugh O'Neill) 413 plants (161424, 162617, exchanges).

CAZIER, MONT A., New York, N. Y.: 15 beetles representing 11 species, 1 of which is a paratype (161881).

CHACE, E. P., San Pedro, Calif.: 12 amphipods and 6 isopods from beach near Asilomar, Calif. (161101); approximately 30 fossil Crustacea from the Upper San Pedro Pleistocene formation of California (162323).

CHAMBERLAIN FUND, FRANCES LEA, Smithsonian Institution: 745 land and fresh-water shells of the Calvert Collection (159694); a green jade piece from Burma and 1 strand of reddish brown jade from Turkestan (161248); 1 andalusite gem from Minas Novas, Minas Geraes, Brazil (161789); 98 specimens of mollusks (162458).

CHANCE, C. W., Shreveport, La.: 1 beetle from Shreveport, La. (162856).

CHANDLER, Dr. ASA C., Houston, Tex.: 17 mollusks from Texas (160392).

CHASE, Mrs. AGNES, Washington, D. C.: 69 grasses from Mexico (161610); 96 grasses (162240); 19 grasses from Paraguay (162416). (See also under Dr. Robert F. Hoover and José V. Santos.)

CHASE, VIRGINIUS H., Peoria Heights, Ill.: 80 plants (162079).

CHASE, Dr. W. H., Cordova, Alaska.: Male skull with lower jaw from an old rock cavern near Alganik, Alaska (161122).

CHEN, Dr. H. T., Hong Kong: 17 mollusks from China (161702).

CHENG, Dr. T. H., Shaowu, Fukien, China: 331 miscellaneous insects from China (157886).

CHINN, BERTHA, Washington, D. C.: Silver pencil with disappearing point, probably about 1850 (162861).

CHRISTENSON, Prof. R. O., Auburn, Ala.: 21 crustaceans, 291 mollusks, 1 ascidian, 1 stomatopod, 5 fishes, and some echinoderms (160709, 161530).

CHRYSLER, Prof. M. A. (See under Rutgers University.)

CIBA PHARMACEUTICAL PRODUCTS, INC., Summit, N. J.: 1 specimen each of sulfathiazole powder and tablets for addition to the pharmacy collection (163273).

CIVIL WORKS ADMINISTRATION, in cooperation with Smithsonian Institution and Bureau of American Ethnology: Archeological collection obtained in the course of excavations conducted by Dr. F. H. H. Roberts, Jr., during the winter of 1933–34, under the Smithsonian Institution–Civil Works

Administration–Bureau of American Ethnology appropriation, at Shiloh National Military Park, Pittsburg Landing, Hardin County, Tenn.; male skeleton from deep trench west of mound A (W. 407, N. 235), Shiloh National Monument (152153).

CLAGETT, ERNEST T., Washington, D. C.: 1 jack rabbit, introduced species (162314).

CLARK, AUSTIN H., Washington, D. C.: 11 mollusks from Virginia (160993); 1 blue jay (162465).

CLARK, Prof. BRUCE L. (See under University of California, Museum of Paleontology.)

CLARK, Mrs. M. E., Terrace, British Columbia: (Through C. A. Frost) A small collection of miscellaneous insects and 1 vial containing 2 mollusks (162378).

CLAUSEN, Prof. ROBERT T. (See under Cornell University.)

CLEMENT, Brother, Santiago, Cuba: 25 ferns from Cuba (160923).

CLIME, WINFIELD S. (See under Jan and Ted Irvine.)

CLOKEY, Dr. IRA W., South Pasadena, Calif.: 126 plants from Nevada and California (162077, 162911).

COBBAN, WILLIAM A., Bismarck, N. Dak.: 3 fossil crabs from the Upper Cretaceous, Pierre shale, of North Dakota (162202).

COCHRAN, Dr. DORIS M., Washington, D. C.: Process sample of hand-darned netting, with original paper pattern, made during the 1870's by a relative of the donor (163070). (See also under Mrs. Lee M. Stewart.)

COCKERELL, Prof. T. D. A., Boulder, Colo.: 53 bees representing 49 species, 1 species represented by type and 12 by cotypes (160383); 198 named specimens of bees representing 171 species, 9 represented by types and 28 by 32 cotypes (160680); 37 named bees representing 37 species, 5 represented by types and 6 by cotypes (160849); 44 named bees and 1 wasp, representing 44 species, 1 represented by type and 14 by cotypes (160978); 11 bees representing 8 species in 2 genera (160979, deposit); 44 specimens of insects, 2 Lepidoptera, 1 hemipteron, and 39 species of bees, 5 of them types and 4 paratypes (161145); 50 bees, representing 4 species (161146, deposit); 96 bees representing 89 species, 9 of them by types and 15 by cotypes (161428); 78 bees representing 17 species, 6 represented by 33 cotypes (161430, deposit); 78 named bees representing 73 species, 13 represented by types and 15 by 16 cotypes (161450).

COCO GROVE, INC. (See under J. H. Marsman.)

COHEN, ELIAS, Baltimore, Md.: Specimen of fern from Maryland (161620).

COLBURN, ALBERT E., Los Angeles, Calif.: 272 bird skins from Veracruz, Mexico (162415).

COLE, Dr. A. C., Jr., Knoxville, Tenn.: 8 ants (162501, exchange).

COLGATE, ADELE S., Tuxedo, N. Y.: Lithograph of the thoroughbred running horse "Highlander," made by N. Currier (161709, loan).

COLLOM, Mrs. ROSE E., Payson, Ariz.: 138 plants from Arizona (160964, 161119).

COLOMBIA, GOVERNMENT OF. (See under Smithsonian Institution, National Museum, E. A. Chapin.)

COLORADO MUSEUM OF NATURAL HISTORY, Denver, Colo.: (Through Alfred M. Bailey) 4 ptarmigan skins showing plumages new to collection (161442).

COLORADO SCHOOL OF MINES, Golden, Colo.: 230 specimens, 33 species, of Pennsylvanian fossils from Colorado, Oklahoma, and New Mexico (162698, exchange).

COLORADO STATE COLLEGE EXPERIMENT STATION, Fort Collins, Colo.: Plant from Colorado (162521).

COLUMBIA UNIVERSITY, New York, N. Y.: (Through Edward T. Hall, Jr.) 1 lot of bones from archeological sites (162237).

COMMERCE, U. S. DEPARTMENT OF:

Bureau of Marine Inspection and Navigation, Galveston, Tex.: (Through Howard B. Lambdin) 4 mollusks and 1 lot of crustaceans (160984).

National Bureau of Standards, Washington, D. C.: Collection of 76 Terrazzo marbles, all but 2 American (162910).

CONE, J. F., Wikieup, Ariz.: 1 tailless whip-scorpion from Arizona (163086).

CONNOR, ELIZABETH, Washington, D. C.: A wrought-iron mirror frame and pedestal, a glazed stoneware jar, also a blue taffeta waist reputedly in the possession of Nellie Grant during her stay in the White House (162694).

COOK, Mrs. H. L., Alexandria, Va.: 2 white-faced hornet nests collected about 1 mile northwest of Alexandria (161353).

COOK, Dr. O. F. (See under U. S. Department of Agriculture.)

COOKE, Dr. C. WYTHE, Washington, D. C.: 3 valves of fresh-water mollusks, collected north of Immokalee, Collier County, Fla., by G. G. Parker (163185).

COOKE, Lt. Col. DWIGHT IRVING, Washington, D. C.: A homespun, double-weave Jacquard coverlet woven in 1839 near Sardinia, Erie County, N. Y., and an example of punch-stitch embroidery as used in the ornamentation of an infant's dress (163106).

COOPER, Dr. G. ARTHUR, Washington, D. C.: 30 mollusks from Fort Worth, Tex. (161321). (See also under Smithsonian Institution, U. S. National Museum.)

COPE, JAMES. (See under Automobile Manufacturers Association.)

CORE, Dr. EARL L. (See under West Virginia University.)

CORNELL UNIVERSITY, Ithaca, N. Y.: (Through Prof. Robert T. Clausen) Collection of salamanders from central New York (160858).

CORNING GLASS WORKS, Corning, N. Y.: (Through J. Kalinich) A collection of Pyrex and Vycor glass, including household, laboratory, and other special groups of glass, comprising 179 specimens (163151).

CORY, V. L., Sonora, Tex.: Plant from New Mexico (161379).

COTTAM, Dr. CLARENCE C., Washington, D. C.: 62 mollusks from Texas (162568). (See also under U. S. Department of the Interior, Fish and Wildlife Service.)

COTTAM, Dr. WALTER P. (See under University of Utah.)

COTTON-TEXTILE INSTITUTE, Inc., New York, N. Y.: 24 specimens of cotton fabrics produced by American manufacturers for spring and summer of 1942 (162386); 25 specimens of cotton fabrics produced by American manufacturers for fall and winter of 1941 (161221).

COWLES, Prof. H. T., Mayagüez, Puerto Rico: 4 plants from Puerto Rico (162609, 163248).

COWLES, Dr. R. P., Baltimore, Md.: 35 mollusks from near Baltimore (161501).

CRAIG, B. A. C., Keymar, Md.: (Through Dr. A. J. Olmsted) 1 limb section 7 inches in diameter, 2 feet long, from a Japanese tree lilac grown on premises of donor (163272).

CRAIG, DAVID and ELEANOR, Washington, D. C.: 4 pictorial prints—"Panther Hollow," 1929; "Live Bait," 1935; "Sun Valley," 1938; "Frozen Rigging," 1940 (160603).

CRAMER, W. S., Allentown, Pa.: Skull cap of a sirenian from Plumpoint, Calvert County, Md. (161199, exchange).

CRANDALL, R. H., Wilawana, Pa.: 1 beetle, new to collection (162882, exchange); 32 beetles, representing 5 species in 3 genera (163250, exchange).

CRONQUIST, ARTHUR, Minneapolis, Minn.: 25 plants from Idaho (161949).

CYPRUS MINES CORPORATION, Los Angeles, Calif.: A collection of typical minerals from Cyprus (30 specimens) (160464).

DANIEL, Rev. Brother, Medellín, Colombia: 111 plants from Colombia (160763, 162933, 163223).

DARLINGTON, Dr. P. J., Jr. (See under Harvard University, Museum of Comparative Zoology.)

DAUGHTERS OF THE AMERICAN REVOLUTION, NATIONAL SOCIETY OF THE, Washington, D. C.: (Through Helen S. Johnson) Photographs of Mary Isabelle Steinbeck Neilner, one made about 1850 and the other about 1878, showing typical costumes of these 2 periods (162038).

DAVIS, A. C., Beltsville, Md.: A collection of larvae and pupa of beetles (160991).

DAVIS, Mrs. A. C., Pasadena, Calif: 1,596 beetles (162309); 61 specimens of pinned and alcoholic material and 245 slides of miscellaneous insects (162413).

DAVIS, L. IRBY, Harlingen, Tex.: 1 plant from Texas (162759).

DEADERICK, Dr. WILLIAM H., Hot Springs, Ark.: 31 lots of Upper Cretaceous Ostracoda from southwestern Arkansas (162868).

DEAN, MARY E., Washington, D. C.: 3 silk specimens—a figured scarf from India, a ribbon, and a scarf of weft-figured gauze from France; also an unfinished specimen of fine needlework (163214).

DEEVEY, Dr. EDWARD S., Jr., Houston, Tex.: 2 fiddler crabs (162423).

DEGENER, OTTO, Waialua, Oahu, T. H.: 108 plants from the Hawaiian Islands (161963).

DEGRAW, Mrs. P. V., Washington, D. C.: Telegraph key used by President Theodore Roosevelt in formally opening the Lewis and Clark Centennial Exposition, Portland, Oreg., June 1905, and Masonic Fair, Washington, D. C., 1907 (162898).

DEIGNAN, H. G., Washington, D. C. (See under Federal Security Agency, U. S. Public Health Service.)

DELACY, Dr. ALLAN. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

DE LAUBENFELS, Dr. M. W., Pasadena, Calif.: 17 sponges from the Puget Sound region, including types of new species (161848).

DEL SOLAR, Dr. ENRIQUE M., Lima, Peru: (Through Milton J. Lobell) About 70 crustaceans, 1 alcyonarian, 2 pipefishes, and 10 mollusks (161153).

DEPARTAMENTO DE BOTANICA DO ESTADO, São Paulo, Brazil: (Through Dr. F. C. Hoehne) 39 grasses from Brazil (155395, 161167).

DEPAUW UNIVERSITY, Greencastle, Ind.: 2 ferns from Texas (160950, exchange).

DERR, H. B., Fairfax, Va.: 2 mollusks collected in 1896 in Calumet Lake, Ill. (161716).

DETWILER, DONALD J., Arlington, Va.: 26 specimens of radio apparatus, including early broadcast receivers, spark coil transmitter, and radio tubes (163276).

DIETRICH, Dr. HENRY, Ithaca, N. Y.: 6 beetles (161479).

DODGE & OLCOTT Co., New York, N. Y.: 6 4-oz. specimens of volatile oils (161144); 1 specimen each of oil of nutmeg and artificial oil of bitter almond for the materia medica collection (162968).

DOLLEY, JOHN S., Merritt, Wash.: 1 chipmunk (161624).

DOUGHERTY, Mrs. BERTHA, Old Lyme, Conn.: 36 etchings for special exhibition May 1 to 31, 1942 (162900, loan).

DOUGHERTY, ELLSWORTH C., Berkeley, Calif.: About 100 amphipods (163001).

DOUTT, J. KENNETH. (See under Carnegie Museum.)

DOW, Dr. RICHARD, Reading, Mass.: 42 miscellaneous insects collected in Florida, South Carolina, and Virginia. (161971). (See also under Prof. C. T. Brues.)

DRAKE, Prof. CARL J., Ames, Iowa: 19 bugs (159440, exchange).

DRAKE, WALTER H., Mount Dora, Fla.: 1 trunk section of orange wood from Florida (160700).

DRAPER CORPORATION, Hopedale, Mass.: An original A-model Northrop loom built by the Draper Corporation for Gaffney Manufacturing Co., of Gaffney, S. C. (160340).

DRESSEL, EDWIN H., Philadelphia, Pa. (See under U. S. Department of the Treasury, Bureau of the Mint.)

DROUET, Dr. FRANCIS, Chicago, Ill.: 42 plants from Maryland (162822).

DUCKE, Dr. A. D., Manãos, Brazil: Plant from Brazil (163222, exchange).

DUNCAN, WILBUR H. (See under University of Georgia.)

DU PONT, E. I., DE NEMOURS & Co., Inc., Wilmington, Del.: A series of 7 photographs illustrating steps in the production of natural and synthetic camphor; 2 empty commercial 1-pound camphor cans; and 1 cake each of natural and synthetic camphor sealed in heavy, transparent, plastic sheeting (161706); (through Harold L. Minor) 1 calendar for 1942, illustrated with 12 reproductions of paintings of historical subjects, a sample of lithographic printing by Rogers, Kellogg, Stillson, Inc., New York, N. Y. (162057).

DURHAM, Dr. J. WYATT. (See under University of California.)

DUTILLY, Father, Washington, D. C.: 2 beetles collected at Chesterfield Inlet (162171).

DYER BROTHERS, Inc., Washington, D. C.: 2 kits of materials for silk-screen printing; 4 Christmas cards, 16 prints and 7 posters, all printed by the silk-screen process. For special exhibition during October 1941 (161351 loan).

EASTMAN, ALICE, New York, N. Y.: Water-color sketch emblematic of the cordial relations between France and the United States in 1918, painted by Georges Scott (160477).

EATON-CLARK Co., Detroit, Mich.: (Through Richard C. Hedke) 2 copies of a bronze medal commemorating in 1938 the centennial anniversary of the founding of the Eaton-Clark Co. in 1838 (162748).

EDMOND, Dr. COURTNEY, Clifton Forge, Va.: 1 parasitic worm (162278).

EGBERTS, W. H. (See under Mrs. E. C. Richardson.)

ELAND, SAMUEL and THERESA, East Toledo, Ohio: (Through Grace Shamp) An emu eggshell brought from Australia about 1870, carved over entire surface with designs in low relief representing native Australian fauna and conventionalized geometric designs (160556).

ELDER, Mrs. R. B. Stockbridge, Vt.: 1 kingbird (163174).

ELLIOTT, J. T., Washington, D. C.: Stone ax found 15 years ago on the east bank of White River, near Noblesville, Hamilton County, Ind. (161407).

ELLIS, T. KENNETH. Hot Springs, Va.: 25 land snails from Virginia (160665).

ELLSWORTH, LINCOLN (ELLSWORTH PERUVIAN EXPEDITION, 1941), New York, N. Y.: (Through Dr. Waldo L. Schmitt) 1 bottle of plant specimens and 1 insect (160649).

EMERSON, JOHN HAVEN, Cambridge, Mass.: The first Emerson respirator (iron lung) completed in July 1931, for producing artificial respiration over long periods of time (160980).

EMERY, GEORGE D., Co., New York, N. Y.: Small trunk section of Malayan elder, of which pith helmets are made (162859).

EMERY, Mrs. L. C., New York, N. Y.: Hand-wrought and decorated silver teaspoon from India (161528).

EMMERSON, MILO ELSON, Washington, D. C.: 4 ancient Egyptian glass medicine bottles collected by the donor (160776); "Boyd's Battery," an alleged electrotherapeutic device (161047); a blue glass medicine bottle of early American manufacture, period of 1770, complete with stopper (161519); 3 antique black glass Bristol vases collected by donor in London (163323).

EMMONS, Dr. CHESTER W. (See under Federal Security Agency, National Institute of Health.)

ENGELHARDT, GEORGE P., Hartsdale, N. Y.: 5,103 moths (160902, 161707).

ENGINEERING AND RESEARCH CORPORATION, Riverdale, Md.: A scale model of the Ercoupe airplane (163275).

ESSIG, Prof. E. O., Berkeley, Calif.: 14 slides of aphid paratypes, representing 8 species (162966).

ESTACIÓN EXPERIMENTAL AGRONÓMICA, Santiago de las Vegas, Cuba: (Through Dr. Julian Acuña) 3 plants from Cuba (162375, exchange).

EVENING STAR NEWSPAPER CO., Washington, D. C.: (Through Charles H. Ruth, Jr.) 1 stereotype matrix, 15 photographs, 1 sheet of newspaper copy, 4 galley proofs and 2 copies of the Evening Star newspaper—additions to and replacements for exhibit "The Making of a Newspaper" (160777).

EYERDAM, WALTER J., Seattle, Wash.: 17 mollusks (154652); 40 mosses from Alaska (161995).

FEDERAL SECURITY AGENCY:

National Institute of Health, Bethesda, Md.: (Through Dr. Chester W. Emmons) 8 rodents (162366).

U. S. Public Health Service, Ancon, Canal Zone: (Through Dr. W. H. W. Komp) 3 mollusks from Quare Reservoir, north of the town of Arima, Trinidad, B. W. I. (162615); (through H. G. Deignan) 1 bat collected by Dr. Komp at Monypenny Point, Gulf of Fonseca, Nicaragua, in January 1942 (162573).

FENNAH, R. G., St. Lucia, British West Indies: 33 insects, representing 18 species, 14 represented by types and 14 by 16 paratypes or allotypes (162881); small collection of miscellaneous insects from St. Lucia (160654); 109 specimens of Homoptera, representing 15 species, 13 represented by type material including holotype and allotype (161224).

FERGUSON, Dr. F. F., Norfolk, Va.: 75 marine invertebrates (162134).

FERGUSON, THOMAS M., Corpus Christi, Tex.: 2 fence lizards from Corpus Christi (161698).

FESSENDEN, G. R., Washington, D. C.: 5 plants from the eastern United States (162790).

FIELD, Dr. HENRY, Chicago, Ill.: 111 plants from North Carolina (162159).

FIELD MUSEUM OF NATURAL HISTORY, Chicago, Ill.: 5 photographs of plants (160540, exchange); 1,290 plants from Guatemala (161369, 162524, exchanges); 1 fish (161875, exchange); 2 plants from the Hawaiian Islands (161948, exchange); 478 plants from tropical America (162633); 275 plants (algae and bryophytes) (162760, exchange).

FIERCE, MAUDE M., Washington, D. C.: Block-printed, Paisley-bordered "summer shawl" of magenta cashmere twill, purchased before 1863 in Ohio for the donor's mother, Mrs. Mary Josephine Fierce, of Wilkesville, Ohio (161762).

FINE, BENJAMIN B., Boulevard Heights, Md., 1 weevil (160844).

FIRESTONE TIRE & RUBBER CO., Akron, Ohio: A series of 8 specimens illustrating the use of rubber in national defense (161845, loan).

FISCHTHAL, JACOB H., Ann Arbor, Mich.: Type specimen of trematode (162389).

FISHBACK, Mrs. J. H., Washington, D. C.: Polynesian tapa cloth (162174).

FISHER, Dr. A. K., Washington, D. C.: 1 nest of barn swallow from New Mexico (162711).

FISHER, FRANKLIN, Chevy Chase, D. C.: 1 flicker (160391).

FISHER, GEORGE L., Houston, Tex.: 157 plants from Texas (160968, 162857).

FISHER, KURT A., Port-au-Prince, Haiti: 3 lots of potsherds and worked flakes from site B-2, Goat Island, Isle des Cabrits and Valembrun, respectively, Port-au-Prince Bay, Haiti (160156, 160547).

FISHER, Dr. WALTER K., Pacific Grove, Calif.: 3 sipunculids from Auk Bay, Juneau, Alaska (162209). (See also U. S. Department of the Interior, Fish and Wildlife Service, and Stanford University.)

FISHER SCIENTIFIC Co., Pittsburgh, Pa.: 1 Fisher-Hirschfelder atom model kit (162879).

FLAGG, ARTHUR L., Phoenix, Ariz.: 1 specimen of alabandite from Santa Cruz mine, between Sinora and Topia, Durango, Mexico (162163).

FLEMING, CHARLES B., Jr. (See under U. S. Department of the Interior, National Park Service.)

FLORIDA AGRICULTURAL EXPERIMENT STATIONS, Gainesville, Fla.: (Through Dr. A. N. Tissot) 5 insects, representing 4 species from Florida (160356); a small collection of insects from Florida (160934); 1 fly (162234).

FLORIDA STATE MUSEUM, Gainesville, Fla.: (Through T. Van Hyning) 6 boat-tailed grackles (157634, exchange).

FLORY, Dr. WALTER S., College Station, Tex.: 1 plant from Texas (160057).

FORD, CAROLINE MARINE, San Francisco Calif.: (Through Arnold R. Bowhay) An original hook-and-eye machine, U. S. Patent No. 112331, March 7, 1871, invented and patented by Jeremiah T. Ford, father of the donor (160626).

FOSBERG, Dr. F. R. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

FOSTER, MARK M., Denio, Oreg.: Fragment of fossil wood with entwined species of vine from Rainbow Ridge Fire Opal Mine, Humboldt County, Nev. (162816).

FOSTER, M. B., Orlando, Fla.: 2 plants from Brazil (160348, 160495).

FOWLER, HENRY W. (See under Academy of Natural Sciences of Philadelphia.)

FOWLER, JAMES, Washington, D. C., 400 land and fresh-water mollusks from West Virginia, Virginia, and Maryland (160591).

FOX, JAMES, Washington, D. C.: 1 specimen of dovekie (162238).

FOX, LAURETTA E., Natchitoches, La.: 16 mollusks from Keiffer's Prairie, Winfield, La. (161192).

FOX, RALPH (deceased). (See under Russell A. Keller.)

FRANKLIN and MARSHALL COLLEGE MUSEUM, Lancaster, Pa.: 1 mollusk from Cocalico Creek, Reamstown, Lancaster County, Pa. (162460).

FRASER, MORRIS. (See under Zoological Research Supply.)

FRAZIER, Dr. RUSSELL G. (See under Joseph Burger.)

FREEMAN, Lt. C. M. (See under U. S. War Department, Army Air Forces.)

FREEMAN, O. M., Washington, D. C.: 2 plants from Maryland (162417).

FREER, R. S., Lynchburg, Va.: 1 black-throated blue warbler (162967).

FRESNILLO Co., Fresnillo, Zacatecas, Mexico: (Through J. H. Ashley) 6 specimens of lead-silver ores from Fresnillo (160996).

FRITTS, Mrs. C. C., Ocean Grove, N. J.: 1 large and 1 small decorated porcelain cup and saucer imported from Nanking, China, about 1800 (163007).

FRITZ, Dr. MADELEINE A. (See under Canadian Government, Royal Ontario Museum of Paleontology.)

FRIZZELL, DON L., Negritos, Peru: 15 crabs, 15 hermit crabs, 1 hippa, 10 sipunculid worms, 1 polychaete worm, reptiles, mollusks, and echinoderms (160433).

FROST, C. A., Framingham, Mass.: 28 beetles (162414, 162571); (through Mrs. Doris H. Blake) 4 beetles (162950). (See also under Mrs. M. E. Clark.)

FULTON, Dr. B. B. (See under North Carolina State College.)

FUNDENBURG, Mrs. GEORGE B., Fort Lauderdale, Fla.: 1 embryo of loggerhead turtle (160355).

GALLEGO M., F. LUIS, Medellín, Colombia: 222 miscellaneous insects from Colombia (150849, 158537).

GALTSOFF, Dr. PAUL S., Washington, D. C.: 2 marine shells from Louisiana and Washington (162693).

GARDNER, RAY P., Kirksville, Mo.: A 5½-inch bronze statuette of Dr. A. T. Still, founder of osteopathy (162474).

GARTH, JOHN. (See under Allan Hancock Foundation.)

GASTON, Dr. EUGENE A., Framingham, Mass.: 1 beetle (163299).

GATES, Dr. G. E., Rangoon, Burma: About 25 earthworms (163072).

GAUMER, CLAY F., Alvin, Ill.: Pin inscribed "Carry A Nation" (160750).

GAUSS, H. C., Cape May, N. J.: 1 sponge, 1 hydroid, 2 ascidians, and mollusk eggs (161888).

GAZIN, Dr. C. L., Washington, D. C.: 19 snails from near Marsh Spring, Wyo. (161320). (See also under Smithsonian Institution, National Museum.)

GENERAL MOTORS CORPORATION, Detroit, Mich.:

Allison Division: An Allison airplane engine, Type V-1710-C, used in current fighters in service with the American and British air forces (162141, loan).

Fisher Body Division: Pontiac automobile, 1939, with transparent plastic body (162726, loan).

GEORGE, Mrs. MAUDE C., and FLORENCE CARNCROSS, New York, N. Y.: 2 swords owned during the Civil War by Assistant Adjutant General Septimus Carncross, U. S. Volunteers (160293).

GEORGIA, UNIVERSITY OF, Athens, Ga.: (Through Wilbur H. Duncan) 100 plants from Georgia (161476, exchange).

GHORMLEY, ROBERT LEE, Jr., Washington, D. C.: Mummied right hand from Egypt (160394).

GIAMONCO, CHESTER, Monterey, Calif.: (Through A. Sorensen) 3 mollusks (156894).

GIANELLA, Prof. V. P., Reno, Nev.: 1 specimen each of brucite and hydromagnesite from Paradise Range, Nye Co., Nev. (161613); 1 specimen of clinoclasite from Majuba Hill, Nev. (162263).

GILKEY, GORDON W., Columbia, Mo.: 54 etchings showing the construction and completion of the New York World's Fair, 1939–40 (162497).

GLASSELL, STEVE A., Beverly Hills, Calif.: 1 stomatopod, type of a new species, 3 phyllopods, and 63 crabs representing types, allotypes, and paratypes of 2 new species (158863, 161586, 161788).

GLEASON, P. R., Santa Rita, N. Mex.: 19 specimens of Lepidoptera (162931).

GLENN, MURRAY O., Magnolia, Ill.: 81 moths (161581, 161844).

GOBLE, FRANS C., Delmar, N. Y.: 6 nematodes, types (161913).

GODDARD, ARCHIBALD N., Detroit, Mich.: 1 polished stone of obsidian from Davis Creek, Modoc County, Calif. (160945).

GOELLNER, Dr. K. E., Ann Arbor, Mich.: 2 crayfish (161633).

GOLDRING, Dr. WINIFRED, Albany, N. Y.: 4 specimens of fossil hydroid corals from the Upper Manlius formation of New Salem, N. Y. (163241).

GONZÁLEZ, JENARO, Mexico, D. F., Mexico: 1 specimen of magnetite from Isla Margarita, Baja California (160437).

GOODRICH, B. F., Co., Akron, Ohio: A series of 13 photographs illustrating some of the uses of rubber in national defense (161855); bullet-proof fuel tank for military airplanes (161890, loan).

GOODWIN, Dr. RICHARD H. (See under University of Rochester.)

GOULD, FRANK W., St. George, Utah: 153 plants from the United States (161018, exchange).

GRAHAM, Dr. H. W., Mills College, Calif.: 356 amphipods and 26 isopods (161482).

GRAND CANYON NATIONAL PARK. (See under U. S. Department of the Interior, National Park Service).

GRASSMAN, P. C., Phoenix, Ariz.: 59 beetles, representing 19 species (161868).

GRESH, EARL, St. Petersburg, Fla.: 1 lady's purse with sides made of birdseye maple (161347, exchange).

GROUT, Dr. A. J., Newfane, Vt.: Specimen of moss from Puerto Rico (160346, exchange).

GRUBBE, Dr. EMIL H., Chicago, Ill.: 7 specimens illustrating steps in evolution of X-ray therapy (161220).

GRUEN WATCH Co., Cincinnati, Ohio: Giant operating display model of Gruen watch (161782).

GRUICH, ABRAHAM GEORGE (deceased): (Through Ben H. Brown) A collection of musical instruments consisting of 3 bagpipes and accessories, 1 wooden and 1 metal flageolet (161412, bequest).

GUNTER, GORDON, Rockport, Tex.: 4 fishes, 23 crabs from the Gulf of Mexico, 8 stomatopods, 5 crabs, and 4 callianassas (158197, 160367, 162623, 162955, 163002).

GURNEY, Dr. A. B., Washington, D. C.: 3 Devonian corals from New York (162834).

GUTMANN & Co., INC., Chicago, Ill.: An exhibit entitled "Flexible Rawhide," consisting of a series of 4 photographs, showing stages in the manufacture of rawhide, and a rawhide-covered handbag, mounted on a background made up of small rawhide-covered panels finished in the various colors in which this new type of rawhide is manufactured (162276).

HADEN, HUGH, H., Jr., Birmingham, Ala.: 6 fly larvae (161975).

HAGELSTEIN, ROBERT, Mineola, N. Y.: 1 plant (161947).

HALL, EDWARD T., Jr. (See under Columbia University.)

HALLOWELL, A. F., Ardmore, Pa.: 100 nature photographs for exhibition, September 1941 (160981, loan).

HAMEL, C. C., Georgetown, British Guiana: 7 photographs of plants from British Guiana (161568, 161946).

HAMILTON, Prof. W. J., Jr., Ithaca, N. Y.: 2 mollusks from Chincoteague Island, Va. (160510).

HANCIN, JOHN, Salina, Kans.: 2 plants from Kansas (162629).

HANCOCK FOUNDATION, ALLAN, Los Angeles, Calif.: (Through John Garth) 21 prints, in duplicate, of crabs collected by the Hancock expeditions (161427).

HARDY, Dr. D. ELMO, Lawrence, Kans.: 21 flies, including 11 paratypes (162027, 162896).

HARPER, Dr. R. M., University, Ala.: 39 plants mostly from Alabama, and 69 photographs of plants (162531).

HARRISON, ROGER W. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HARRY, HAROLD, Baton Rouge, La.: 8 pairs of otoliths and 63 mollusks (162376, 162534).

HART, J. L., Nanaimo, British Columbia: 25 amphipods (162472).

HARVARD UNIVERSITY:

Arnold Arboretum, Jamaica Plain, Mass.: 84 plants from Asia (158971, 161307, 161785, exchanges); 39 plants from Fiji (161824, 161063, exchanges); 31 plants from Colombia (160875, exchange); 501 plants from Oaxaca, Mexico (157125); 291 plants from Bolivia, collected by Steinbach (163128, exchange).

Botanical Museum, Cambridge, Mass.: 19 grasses (160350, exchange); 5 orchids (162241, 162559, 162696, exchanges).

Department of Mineralogy and Petrography, Cambridge, Mass.: (Through Dr. Harry Berman) 1 specimen of shattuckite from Ajo, Ariz. (161150, exchange); specimen of cahnite from Franklin Furnace, N. J. (162172, exchange).

Gray Herbarium, Cambridge, Mass.: 141 plants from South America (160588, 160666, 161905, exchanges); 123 plants from Dominica (160778, exchange); 992 plants mostly from the United States (160949, 161611, 162695, exchanges); 68 plants from Nova Scotia and New Brunswick (161301, exchange); 792 specimens of plants (161982, 162522, exchanges); 206 photographic prints, mostly of type specimens of plants (162178, 162334, 162686, exchanges).

Museum of Comparative Zoology, Cambridge, Mass.: (Through Dr. Thomas Barbour and William C. Schroeder) 166 fishes from Liberia and the Cameroons, Africa (159270, exchange); (through Dr. P. J. Darlington, Jr.) 542 beetles representing 156 species (161364, exchange); 5 mollusks from Peru (162283); (through Nathan Banks) 33 specimens of Hymenoptera, representing 9 species (162464); (through Mrs. Doris H. Blake) 14 beetles representing 10 species, all paratypes (162636, exchange); (through Dr. J. C. Bequaert) 4 paratypes of mollusks (162741).

Peabody Museum, Cambridge, Mass.: Earthenware bottle and bowl, polychrome, from the Province of Cocle, Panama (161457, exchange).

HARVEY, L. H., Ann Arbor, Mich: 27 grasses from Mexico (162157).

HASBROUCK, Dr. EDWIN M., Washington, D. C.: 6 ducks (161073, 162294, 162295, 162434); 3 skins of geese from Louisiana and 1 skeleton (162712).

HATHAWAY, LAURENCE J., Arlington, Va.: 2 Stanley steam automobile engines (161627).

HAWAII, UNIVERSITY OF, Honolulu, Hawaii: 13 grasses from the Hawaiian Islands (161456).

HAYWARD, Prof. C. LYNN, Provo, Utah: 75 miscellaneous insects from mountains of northern Utah (158253).

HEBARD, MORGAN, Philadelphia, Pa.: 14 insects, including 6 paratypes (162639, exchange).

HEDKE, RICHARD C., Detroit, Mich.: (See under Eaton-Clark Co.)

HEGEMAN, ANNIE-MAY, Lenox, Mass.: Ancient Egyptian scarabs collected by Mrs. Henry Kirke Porter, mother of donor, and later mounted in 3 necklaces, a bangle, and a comb of filigree gold; also an ancient glass intaglio seal with gold bezel and ring mounting (161345).

d'HEGUERT, Dr. J. SAER, Valencia, Venezuela: 37 plants from Venezuela (162620).

HEIGHWAY, A. E., New York, N. Y.: A specimen of asbestos from Bolivia and 1 of onyx marble from San Luis, Argentina (160446); 1 specimen of lava talc from Madison County, Mont., and 1 specimen of talc from Otero County, N. Mex. (162280).

HENDERSON, HASELL, Bedford, Ind.: 6 sharks' teeth from the Mississippian (Indiana limestone) at Bedford, Ind. (161738).

HENRY, Dr. DORA PRIAULX, Seattle, Wash.: 30 plus barnacles, including type of new subspecies (162722).

HEPNER, LEON W., Lawrence, Kans.: 52 bugs representing 13 species, 11 of which are represented by 35 paratypes (160973, exchange).

HERDE, K. E., M. E. BROCK, and S. J. POLK, Stillwater, Okla.; (Through Prof. R. Chester Hughes) 38 lots of cotypes of helminths (160919).

HERMANN, Dr. F. J., Arlington, Va.: 16 plants from Maryland and Virginia (160586); 2 plants (161908); 1 plant from Alaska (162697).

HERRERA, Dr. A. L., Mexico, D. F.: 30 slides of artificial cells (160429).

HERRICK, Mrs. MARY LANGLEY. (See under Samuel Pierpont Langley, Jr.).

HERTIG, Dr. MARSHALL, Lima, Peru: 3 vials containing many insects (160681).

HEWES, ELIZABETH. (See under Louisiana State University.)

HEWITT, Mrs. C. LOUISE, Washington, D. C.: 391 rocks, minerals, and fossils (160512).

HIBBARD, RAYMOND R., Buffalo, N. Y.: 1 Lower Devonian crinoid from Keyser, W. Va. (160904, exchange).

HICKEY, Mrs. HAZEL C., Washington, D. C.: 1 5-legged frog from Berkshire, Vt. (161132).

HICKMAN, J. F., El Paso, Tex.: 1 lot of tetradymite and gold specimens from Hidalgo County, 15 miles southwest of Hachita, N. Mex. (160467).

HIGGINS, ELMER. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HILDEBRAND, Dr. S. F. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HILE, THEODORE R., Saxton, Pa.: Wooden farm funnel made from section of pine log about 1865 by Abraham Russell, private in Co. D, 91st Pennsylvania Volunteer Infantry, U. S. Civil War, for use on his farm in Huntingdon County, Pa. (160909).

HILTERBRAND, CARL L., Purcell, Okla.: Tip ends of 2 lower incisor teeth or tusks of a mastodon (160468).

HILTON, Dr. WILLIAM A., Claremont, Calif.: 38 lots of pycnogonids, including 14 types and 1 paratype (160485).

HINCKLEY, L. C., Marfa, Tex.: 280 plants from Texas (160927).

HINMAN, Mrs. A. M., Indian Head, Md.: A collection of 21 objects consisting of Moro brasswork and miscellaneous ethnological objects from various tribes of the Philippine Islands (163164).

HINTON, GEORGE B., Aguililla, Michoacán, Mexico: 252 plants from Mexico (160965, 162529).

HIRATA, NOBUO, Okayama City, Japan: 149 specimens of Lepidoptera (150251, exchange).

HOBBS, HORTON H., Jr., Gainesville, Fla.: 22 amphipods, 1 shrimp, 92 isopods, 1 beetle, 9 crayfish, including types of 2 new subspecies and 1 new species, 10 amphipods, 1 oligochaete, 1 flatworm (158964, 161021, 162407).

HOEHNE, Dr. F. C. (See under Departamento de Botanica do Estado.)

HOFF, C. CLAYTON, Quincy, Ill.: 37 ostracods, representing types, cotypes, allotypes, and paratypes of 12 new species (161317).

HOFFMAN, Dr. WILLIAM A., San Juan, Puerto Rico: 115 miscellaneous insects collected in Puerto Rico (156657).

HOLDER, ROBERT R., Mullan, Idaho: Skin of Tibetan fox from Atuntze, Yunnan Province, China (160515).

HOLDRIDGE, LESLIE R., Port-au-Prince, Haiti: 207 plants from Haiti (162110, 163184).

HOLLAND-AMERICA LINE, New York, N. Y.: (Through President Franklin D. Roosevelt) Scale model of the S. S. *Statendam*, 1929 (156485).

HOLMES, SARAH, Edisto Island, S. C.: 29 amphipods taken at Mogart Beach, James River, Va., June 20, 1941 (160500).

HOLMGREN, ARTHUR H., Logan, Utah: 1 plant from Nevada (162210).

HOLT, ERNEST G. (See under Rockefeller Foundation.)

HOOPER, PRENTISS, Ruleville, Miss.: (Through Jesse D. Jennings) Fragmentary male skull with lower jaw, dug up in the delta region of Mississippi (162435).

HOOPES, Capt. E. T., Boston, Mass.: A collection of cutting and thrusting weapons from the Moro of Mindanao, Philippine Islands (163245).

HOOVER, Dr. ROBERT F., Modesto, Calif.: (Through Mrs. Agnes Chase) 2 plants from California (161748).

HOPKINS, M. C., Washington, D. C.: Collection of original drawings of the mollusks made on the Wilkes Exploring Expedition; some drawings of natives and their handicraft; a collection of sea mosses (162909).

HORTON, F. W., Washington, D. C.: 1 specimen of uraninite, uranophane, and gummite from No. 1 pegmatite, Ingersol claim, 2½ miles northwest of Keystone, S. Dak. (162499).

HOSBACH, FREDERICK W., Narberth, Pa.: 1 piece of yellow poplar showing varicolored heartwood (160698); a set of miniature implements, representing the types used for the domestic preparation, spinning, and winding of flax, turned by the donor from ivory (161885).

HOWARD, Dr. LELAND. (See under Library of Congress.)

HRDLIČKA, Dr. A., Washington, D. C.: 1 wood thrush (160395); 4 Russian war posters of the period of the Second World War (162691).

HUBARD, Mrs. ARCHIBALD B. (See under Baroness Emily von Hiller.)

HUBBARD, Dr. C. ANDRESEN, Forest Grove, Oreg.: 5 slides of fleas (162725).

HUBBS, Prof. CARL L. (See under University of Michigan, Museum of Zoology.)

HUBRICHT, LESLIE, St. Louis, Mo.: 300 amphipods (161229, 161724).

HUCKETT, Dr. H. C., Riverhead, N. Y.: 2 flies, holotype and allotype (162618).

HUGHES, ALTON, Pecos, Tex.: 1 plant from Texas (160368).

HUGHES, Prof. R. CHESTER. (See under H. E. Herde.)

HUHLEIN, Mrs. C. F., Louisville, Ky.: 19th-century metal table and metal wicker basket (161025).

HULBIRT, L., Glendora, Calif.: 7 specimens of Lepidoptera (161012).

HULL, Prof. FRANK M., University, Miss.: 4 flies (158794).

HUME, MATILDA E., Washington, D. C.: A sarong of banana fiber woven by a native of Saipan Island, Marianas Group (162176).

HUNGERFORD, Mrs. EDA, Washington, D. C.: 1 infant's embroidered shirt, 2 hand-painted fans, commemorative Knight-Templar steel dagger, and a silver cross; also 11 souvenir spoons (162495).

HUNGERFORD, Prof. H. B., Lawrence, Kans.: 2 bugs (159903, exchange).

HUNNEWELL, Dr. FRANCIS W., Cambridge, Mass.: 1 plant from Guatemala (160634).

HUNZIKER, Dr. ARMANDO T., Buenos Aires, Argentina: 103 plants from Argentina (161045).

HUTNICK, Dr. S. E., Philadelphia, Pa.: First-day cover mailed at MacArthur, W. Va., April 15, 1942 (162878).

HYPERION PRESS OF NEW YORK, New York, N. Y.: 2 reproductions of the work of Mary Cassatt (162401).

ILLINOIS, UNIVERSITY OF, Urbana, Ill.: 1 plant (160504, exchange).

IMLER, RALPH H. (See U. S. Department of the Interior, Fish and Wildlife Service.)

INGRAM, FRANK, Atlanta, Ga.: 5 chalcedony pseudomorphs from Tampa Bay, Fla. (161631).

INSTITUTO AGRONÓMICO DE ESTADO DE SÃO PAULO, Campinas, Brazil: 3 plants from Brazil (162516, exchange).

INSTITUTO DE CIENCIAS NATURALES, Bogotá, Colombia: 2,169 plants from Colombia (160488, 163015, exchanges); (through Dr. Francisco J. Otoya) 487 specimens of beetles from Colombia (160561); 829 beetles from Colombia (162612, exchange).

INSTITUTO MIGUEL LILLO, Tucumán, Argentina: 888 plants from Argentina (160907, 161623, exchanges).

INTERCONTINENTAL RUBBER CO., New York, N. Y.: A 10-pound specimen of deresinated guayule rubber produced at Salinas, Calif., from locally grown guayule shrub (160438).

INTERIOR, U. S. DEPARTMENT OF THE:

Fish and Wildlife Service: 2,250 fishes, mollusks, marine invertebrates, echinoderms, and porpoise, from Peru, 1941 (158454); 5 alligator hides from Georgia (160054); 3 bird skeletons (160664, 160682); 1 nest of the Arizona hooded oriole (160998); 1 catfish from the Amazon River (161181); archeological specimens collected on Amchitka Island, Alaska, by wardens of the Fish and Wildlife Service (161328); 23 birds from New Zealand and Poland, and 3 sets of eggs (25) (162310); 6 beavers (162317, 162406); embryo of porpoise from Grayland, Washington (163181); 18 Alaska birds (Ptarmigan) (163244); 799 mammals transferred by the Fish and Wildlife Service and entered in Museum catalog Nos. 266544–266600, 271601–272742 inclusive between July 1, 1941 and June 15, 1942, not otherwise accessioned (163265); (through Dr. J. W. Aldrich) 2 sets of birds' eggs (161518); (through Ward T. Bower) 2 alcyonarians, 1 bryozoan, 55 mollusks from Alaska (161911); (through Dr. Clarence Cottam) 2 specimens of a new species of Florida fresh-water shell (161760); (through Dr. Allan DeLacy) 11 fishes, 10 Dolly Varden trout from Alaska and 1 lancet from off Vancouver Island, British Columbia, collected in 1941 (161783); (through Roger W. Harrison) a collection of Crustacea, miscellaneous invertebrates, echinoderms, mollusks, and fishes; also algae (161385); (through Elmer Higgins) 3,365 fishes and 250 vials of miscellaneous fish material, amphibians, reptiles, crustaceans, and mollusks from various localities; also echinoderms (159029); (through Dr. S. F. Hildebrand and E. W. Bailey) 7,869 fishes collected in Panama, North Carolina to Texas, Florida, and Mississippi (161570); (through Ralph H. Imler) 3 fishes collected near LeConte Bay, Alaska (vicinity of Petersburg), June 13, 1941, and 1 mollusk (161669, 162462); (through Dr. Walter K. Fisher) 8 sipunculids,

including types of 3 new species and paratype of one species (162-140); (through G. Robert Lunz, Jr.) 50 isopods, 50 mysids, and 50 amphipods (160321).

Geological Survey: 5 lots described specimens of mercury ore from Crook County and other localities in Oregon (161326); 7 type specimens of Ordovician cephalopods from Alaska (162099); 1,553 type specimens of fossils illustrated in a report entitled "The Larger Invertebrate Fossils of the Navarro Group of Texas," by Dr. L. W. Stephenson (162667); 1 boulder of cassiterite from Discovery Claim, Goodwin Gulch, Cape Mountain, western Seward Peninsula, Alaska (162828); (through Dr. L. W. Stephenson) 8 specimens of Unionidae from Texas (160520). (See also under George Langford.)

National Park Service: (Through Thomas Boles) 93 miscellaneous insects collected by Chief Ranger Brodrick in the Carlsbad Cavern (in the bat cave), and 7 Permian brachiopods (161880; 162580); (through Charles B. Fleming, Jr.) 5 plants (160712); (through Grand Canyon National Park, Ariz.) 18 plants from Arizona (161950); (through Louis Schellbach) 6 specimens of *Apus* (160885); (through T. O. Thatcher) 160 miscellaneous insects (158895).

U. S. Antarctic Service: 12 skins and skulls, 2 skeletons and 16 fetuses of seals; 103 birds; 3 fishes; a collection of plants, mostly lower cryptogams; 1 octopus and 1 lot of shrimps collected by J. Perkins (West Base); starfish, insects, and a rock fragment (160277).

IOWA STATE COLLEGE, Ames, Iowa: 71 grasses from Iowa (161774).

IRVINE, JAN and TED, Old Lyme, Conn.: (Through Winfield S. Clime) 2 paintings, water-oil method, showing hills and sky, made by Wilson Irvine, 1 large sheet of marbled paper, water-oil method, made by Wilson Irvine (160765).

IRVING, F. N., Washington, D. C.: 7 ferns from Florida (161435); 3 plants from Maryland (161468).

JACK, Dr. RUPERT W. (See under Department of Agriculture of Southern Rhodesia.)

JENNINGS, CEDRIC. (See under Rhode Island Department of Agriculture and Conservation.)

JENNINGS, JESSE D. (See under Prentiss Hooper.)

JOHNSON, Lt. ENNIS. (See under War Department, Army Air Forces.)

JOHNSON, HELEN S. (See under National Society of the Daughters of the American Revolution.)

JOHNSTON, Dr. HARRY B., Atlanta, Ga.: 11 staurolite specimens from Fannin County, Ga. (161632).

JONES, CORNELIUS S., Washington, D. C.: 56 fishes from Santa Fe branch of Little River, Cameron, Tex. (161124).

JONES, Dr. FRANK MORTON, Wilmington, Del.: 13 Microlepidoptera (161306).

JONES, FRED O., Coulee Dam, Wash.: A collection of fossil alder wood from the Eocene of Eden Valley, Wyo. (156406).

JOSEPH, DAISY, Washington, D. C.: A century-old appliqued cotton "political" quilt top, commemorating the William Henry Harrison presidential campaign of 1840 (163105).

JUTA, JAN. (See under British Government, British Information Services.)

KALINICH, J. (See under Corning Glass Works.)

KANSAS, UNIVERSITY OF, Lawrence, Kans.: (Through Reece I. Sailer) 1 insect, paratype (159824, exchange).

KAUFFELD, CARL F., West New Brighton, Staten Island, N. Y.: 1 mud turtle from near Tampico, Veracruz (161635).

KAY, Dr. MAIRE WEIB, Seattle, Wash.: 3 types of helminths, including a new genotype (160748).

KAYE, F. B., Arlington, Va.: 1 Genie camera, manufactured about 1890 (160487).

KEARNEY, Dr. T. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

KECK, Dr. DAVID D. (See under Carnegie Institution of Washington.)

KEENER, GEORGE G., Knoxville, Tenn.: 100 aquatic insects from Tennessee (159198).

KELLER, RUSSELL A., and RALPH FOX (deceased), Washington, D. C.: 2 male Indian skeletons from near Moorefield, W. Va., plowed up on Leatherman's property in spring of 1941 and reburied (161696).

KELLOGG, Dr. REMINGTON, Washington, D. C.: 1 pine mouse (161110).

KELLY, Comdr. THOMAS. J., San Pedro, Calif.: 1 bluefish (161121).

KENK, Dr. ROMAN, Rio Piedras, Puerto Rico: 50 amphipods from Puerto Rico (161932).

KENTUCKY, UNIVERSITY OF, *Agricultural Experiment Station*, Lexington, Ky.: (through Dr. P. O. Ritcher) 9 beetles, larvae with larval exuviae, representing 3 species (162478, exchange).

KEPNER, Dr. WILLIAM A., Charlottesville, Va.: 2 slides of turbellarian worms, representing types of a new genus and new species, and slides of 2 new species of worms (162705, 161343).

KIENER, Dr. WALTER. (See under University of Nebraska.)

KILLIP, E. P., Washington, D. C.: 31 plants from District of Columbia and vicinity (162821). (See also under Smithsonian Institution, National Museum.)

KINDLE, Dr. CECIL, New York, N. Y.: 2 casts of a trilobite (type) from St. Pauls Inlet, Newfoundland (163101).

KING, Dr. W. V. (See under U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine; also, Rockefeller Foundation, International Health Division.)

KITTREDGE, Miss E. M., Vergennes, Vt.: 4 ferns from Vermont (161727).

KLEBERG, ROBERT J., Jr., Kingsville, Tex.: 1 Afrikander bull (162152).

KLEEREKOPER, Dr. HERMAN, Porto Alegre, Brazil: 713 marine invertebrates (160969, 161863).

KLUG, GUELLERMO, Iquitos, Peru: 467 plants from Peru (161125).

KNIGHT, KENNETH L., Urbana, Ill.: 7 Lepidoptera, representing 5 species (159355).

KNOWLTON, Dr. G. F. (See under Utah State Agricultural College.)

KOMP, Lt. Col. W. H. W., Ancon, Canal Zone: 18 mosquitoes (161708, 163132). (See also under Federal Security Agency, U. S. Public Health Service.)

KOPF, MAX J., Lancaster, N. Y.: 97 specimens of fossil starfishes, crinoids, and blastoids from the Trenton and Hamilton formations of western New York and Canada (160762, exchange).

KROMBEIN, K. V., Washington, D. C.: 32 Hymenoptera, comprising 13 types and 19 paratypes of 26 species (160943).

KRUKOFF, B. A., New York, N. Y.: 279 plants from South America (161245, 162318, exchanges); 1 wood sample from Guatemala (162860).

KUMM, Dr. HENRY W. (See under Rockefeller Foundation.)

LABORATORIO QUÍMICO NACIONAL DE ANÁLISIS E INVESTIGACIÓN, *Ministerio de Minas y Petróleos*, Bogotá, Colombia: (Through Dr. Jorge Ancízar-Sordo) 1 specimen of Santa Rosa, Colombia, meteorite (161080, exchange).

LADD, Dr. HARRY S., Sweet Springs, W. Va.: 8 specimens of cave snails from Craig County, Va. (160640); 4,000 marine shells from Fiji, Australia, and New Zealand (162799); 72 echinoderms from Texas (163192). (See also under Dr. B. L. Trayham.)

LAMBDIN, HOWARD B. (See under U. S. Department of Commerce.)

LAMME, VERNON, Marineland, Fla.: 4 mollusks (161106).

LAMORE, DONALD H., Silver Spring, Md.: 1 mole collected at Beltsville, Md., on April 17, 1939 (161883).

LANE, JOHN, Ithaca, N. Y.: 65 flies representing 13 species, 5 of which are represented by paratypes (160997, exchange).

LANGFORD, GEORGE, Joliet, Ill.: (Through U. S. Geological Survey) 99 fossil plants and animals from the Alleghany beds of the Coal Measures near Wilmington, Ill. (161558).

LANGLEY, SAMUEL PIERPONT, Jr., and Mrs. MARY LANGLEY HERRICK, Tampa, Fla.: Drawing instruments and case owned by Samuel P. Langley when he was a college student (161972).

LASKOWITZ, I. B., Brooklyn, N. Y.: Model showing application of donor's rotary airfoil lifting system, comprising 2 small operable units made of balsa wood (162368).

LEAVENWORTH, WILLIAM, Urbana, Ill.: 80 grasses from Mexico (161402).

LEECH, HUGH B., Vernon, British Columbia: 4 beetles, paratype and 3 other specimens (162836).

LEIM, Dr. A. H. (See under Atlantic Biological Station.)

LEONARD, E. C., Washington, D. C.: 114 specimens of plants from Ohio and Maryland (161983); wood specimens of the flameleaf sumac tree (163220).

LEONARD, GEORGIA L. (deceased): Knotted doily and porcelain picture frame (163266).

LESLIE, S. INGLIS, Lyndhurst, N. J.: Model of Leslie rotary snowplow for railroads, about 1886 (161201).

LEWIS, ANNA, Oklahoma City, Okla.: A package of seeds from Oklahoma (161299).

LEWTON, Dr. FREDERICK L., Washington, D. C.: Wood specimen of Boston ivy that grew on Smithsonian Institution Building (160720).

LIBRARY OF CONGRESS, Washington, D. C.: (Through Dr. Leland Howard) Silver 100-rei piece of the Kingdom of Portugal struck in 1903 (163210).

LIGHT, Col. HARRY B., El Monte, Calif.: (Through R. S. Berry) 5 ceramic photographs, burned on tile and enamel (161764).

LIGHT, Dr. S. F., Berkeley, Calif.: 290 amphipods (160548, 160824).

LIGON, J. STOKLEY, Carlsbad, N. Mex.: 3 skeletons of quail (162885).

LILLY, ELI, & Co., Indianapolis, Ind.: An exhibit illustrating the enteric coating of medicinal tablets (161070).

LINGNAN UNIVERSITY, Canton, China: 17 plants from French Indo-China (161303, exchange); (through Dr. F. A. McClure) 33 plants, mostly type material of bamboo, from China (161833).

LIPSKI, ANTHONY, Edwardsville, Pa.: 1 specimen of millerite from Edwardsville, Luzerne County, Pa. (161472).

LISSIM, SIMON M., New York, N. Y.: A color print, combination of collotype and silk-stencil printing, made in Paris in 1928 by Sandé (162714).

LITTLE, JOHN W., Allanwood, Warwick, Bermuda: Bronze twopence struck for circulation in Bermuda about 1620 (162049).

LOBELL, MILTON J. (See under Dr. Enrique M. del Solar.)

LOOSER, Dr. GUALTERIO, Santiago, Chile: 1 fern from Chile (163129, exchange).

LOUISIANA STATE UNIVERSITY, University, La.: 27 mollusks, fish, and echinoderms from Louisiana (159878, 160652); (through Elizabeth Hewes) 2 crabs and 1 mollusk (158399); (through Prof. J. Harvey Roberts) 10 insects representing 6 species (162591).

LUCES, ZORAIDA, Washington, D. C.: 9 grasses from Venezuela (160483).

LUNDELL, Dr. C. L. (See under University of Michigan.)

LUNZ, G. ROBERT, Jr., Charleston, S. C.: 36 amphipods, 1 parasitic copepod, about 100 mysids (160204, 161158). (See also under U. S. Department of the Interior, Fish and Wildlife Service.)

LYNCH, Dr. JAMES E., Seattle, Wash.: 1,050 amphipods (160502, 161068, 162583).

LYNN, Dr. W. GARDNER, Baltimore, Md.: Type and 7 paratypes of a new species of frog from Jamaica (160190), 74 miscellaneous insects, 2 from Honduras and the others from Jamaica (161786); basal portion of a cetacean skull from the Miocene, Calvert formation, at Plumpoint, Calvert County, Md. (161810).

MACGOWAN, H. P., Westmoreland Hills, Md.: A collection of 117 bows, arrows, and quivers from Indian tribes, also 60 photographs of Colombian Indian subjects (161739).

MACKANESS, Mrs. FRANK G. (See under Tulane University.)

MACKAY, Dr. DONALD C. G., Nanaimo, British Columbia: 1 fossil crab fragment from Aptose, Calif. (161107).

MAIL, G. ALLEN, Kamloops, British Columbia: (Through Dr. F. C. Bishopp) 11 ticks (162204).

MALKIN, BORYS, Eugene, Oreg.: 2 beetles (162590).

MALLETTE, Mrs. MYRTLE, Hampton, Va.: Bordered, bleached muslin quilt, 82 inches square, appliqued with green, red, yellow, and pink dyed cotton cloth in an individual "Whig Rose" pattern and quilted in "Princess Feather" design by the donor's mother, Mrs. Matilda Kramer Whisler, in 1861 (162596).

MANTER, Dr. HAROLD W., Lincoln Nebr.: 5 slides of type material of trematodes (162520).

MARSMAN, J. H., Paracale, Camarines Norte, Philippine Islands: (Through Coco Grove, Inc.) 4 specimens of tektites from dredgings in the Paracale Bay, Philippine Islands (161920).

MARTIN, Dr. JOEL MANN, Indianapolis, Ind.: 1,000 plus amphipods from Florida (161453).

MARTÍNEZ, JUAN, Montevideo, Uruguay: 11 characid fishes from near Montevideo, Uruguay, collected by donor (161493).

MARTÍNEZ, Prof. M., Mexico, D. F.: 5 specimens and 2 drawings of a plant from Mexico (160521, 162248).

MAXEY, GEORGE B., Salt Lake City, Utah: 20 specimens of Lower Pennsylvanian fossils from Utah (163102).

MAXON, Dr. WILLIAM R., Washington, D. C.: 6 plants from Maine (161749).

MAWHINNEY, ARTHUR S., New York, N. Y.: 72 portraits of dogs, all champions (162635, loan).

MCATEE, W. L. Washington, D. C.: 25,000 specimens of Hemiptera (163191).

MCCALLION, JAMES, Staten Island, New York, N. Y.: 2 turtles from Texas (163050).

MCCLELLAN, Mrs. GEORGE B., Washington, D. C.: 3 medals, 4 badges, and 1 decoration owned by the Hon. George B. McClellan (161593).

MCCLURE, Dr. F. A. (See under Lingnan University.)

MCCREA, DAVID T. (See under Estate of Mary E. McCrea.)

MCCREA, ESTATE of MARY E., Astoria, Oreg.: (Through David T. McCrea) 13 specimens consisting of fine needlework, exemplified by a quilt and infants' clothing made by Mrs. Mary Lawson Ruth McCrea (1835–1880) and family mementoes intimately connected with her (160721).

MCDEVITT, TERESA, Washington, D. C.: 1 etching by Franz Xaver Rektorzik (163026).

McDOUGALL, KENNETH D., Durham, N. C.: 54 amphipods, 17 shrimps (162578).

McDUNNOUGH, Dr. J. (See under Canadian Government, Department of Agriculture.)

McELVARE, ROWLAND R., New York, N. Y.: 10 specimens of Lepidoptera (161478).

McKIM, Mrs. WILLIAM DUNCAN, Washington, D. C.: A collection of miscellaneous antiques, objects of art and of folk art from various European countries, also photographs from various European countries (161740).

MECHLIN, LEILA. (See under Anonymous.)

MELBOURNE BOTANIC GARDENS AND NATIONAL HERBARIUM, South Yarra, Australia: 50 plants from Australia (160351, exchange).

MENZEL, R. W. (See under Virginia Fisheries Laboratory.)

MERIDEN GRAVURE CO., Meriden, Conn. (Through P. B. Allen). Hand-colored collotype, reproducing an engraved title page to "Nederlandesche Vogelen" (162403).

MERRIAM, Dr. C. HART (deceased) (through Mrs. M. W. Talbot): Ethnological material from the Indians of California and from a Plains Indian tribe; also human skeletal material (160775, deposit).

MERRILL, Dr. E. D., Jamaica Plains, Mass.: 59 ferns from Bolivia (160589).

MERRISS, CLINTON W., Fort Gibson, Okla.: 12 blastoids from early Pennsylvanian rocks of Oklahoma (161471).

MÉTRAUX, Dr. ALFRED, Washington, D. C.: A collection of objects reputedly used in the cult practices of voodoo religion, originally collected by the Catholic clergy of Haiti (163278).

METROPOLITAN CAMERA CLUB COUNCIL, Rockville Centre, N. Y.: 103 pictorial photographs exhibited during January 1942 (161991, loan).

METROPOLITAN LIFE INSURANCE CO., New York., N. Y.: 7 strip films entitled: "Madame Curie—Story of Radium," "Edward Jenner—Story of Smallpox Vaccination," "Robert Koch—Discovery of Tubercle Bacillus," "Florence Nightingale—Founding of Professional Nursing," "Louis Pasteur—Germ Theory of Infection," "Walter Reed—Conquest of Yellow Fever," "Edward L. Trudeau—Crusade against Tuberculosis," for use in delineascope in section of public health (163274).

MEYER, FRED G., St. Louis, Mo.: 1 fern from Washington (162418).

MEYEROWITZ, WILLIAM, New York, N. Y.: 56 etchings and drypoints in black-and-white and in color, for exhibition during December 1941 (161766, loan); two etchings, "Massachusetts Landscape" and "Out to Sea" (162380).

MIAMI, UNIVERSITY OF, Coral Gables, Fla.: (Through Prof. E. Morton Miller) 10 termites (161193).

MICHENER, Dr. C. D., New York, N. Y.: 7 specimens of Hymenoptera, representing 5 species, 3 by a paratype each (161973).

MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich.: (Through Dr. C. L. Lundell) 157 grasses from Michigan and Ontario (161437, exchange); 99 grasses from New Guinea and China (162020, exchange).

Museum of Paleontology: 1 scapula of reptile from the Permian of Texas (162539, exchange); various lots of invertebrate fossils from the Silurian and Devonian rocks of Ohio, Michigan, Sweden, Spitzbergen, etc. (162709, exchange).

Museum of Zoology: (through Dr. C. L. Hubbs) 166 fishes from Tennessee Valley Authority (160193, exchange) and 72 fishes (29 paratypes) from Brazil, California, Yucatán, and Venezuela (161853, exchange.)

MICKEL, Dr. C. E., St. Paul, Minn.: 1 insect (162133, exchange).

MILES, Lt. Col. JOHN L., Bethesda, Md.: Large collection of scrapbook material on the Moisant group of early fliers contained in 2 packing boxes and 1 album (162843).

MILLE, Rev. LUIS, S. J., Manabi, Ecuador: 24 plants from Ecuador (157960).

MILLER, Dr. ALDEN H. (See under University of California, Museum of Vertebrate Zoology.)

MILLER, Prof. E. MORTON. (See under University of Miami.)

MILLER, GERRIT S., Jr., Washington, D. C.: Approximately 200 shells from the Salton Sea, Calif. (161807); one human sacrum (163213).

MILLER, ORIE O., Akron, Pa.: 22 bird skins from Paraguay (162311).

MILLER, ROBERT H., Los Angeles, Calif.: Mandolin with inlay decoration and leather case, handmade by Gene Trusiewicz in New York in 1900 (162716).

MILLIRON, H. E. (See under University of Minnesota.)

MINISTERIO DA EDUCAÇÃO E SAUDE, Rio de Janeiro, Brazil: 442 adult mosquitoes, representing 86 species and 63 pupae of 18 species; 58 larvae of 20 species, and 30 slides of terminalia, representing 30 species, all from Brazil (161926).

MINNESOTA, UNIVERSITY OF, St. Paul, Minn.: (Through H. E. Milliron) 47 specimens of Hymenoptera (158624, exchange).

MINOR, HAROLD L. (See under E. I. du Pont de Nemours & Co.)

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 5 grasses from Mexico and Guatemala (160482, exchange); 151 plants (160948, exchange); 86 plants from Massachusetts and tropical North America (161143, exchange).

MISSOURI, UNIVERSITY OF, Columbia, Mo.: (Through Douglas E. Wade) 24 bats from Rochesport, Mo. (161941).

MITMAN, CARL W., Washington, D. C.: Meerschaum pipe with cloudy amber stem, bearing the mark of Eug. Dillen, Brussels, Belgium, and dating approximately from the period 1870–1880, originally presented to donor by W. Howard Skinner, Vita, Calif. (160539).

MITTLEMAN, M. B., Indianapolis, Ind.: 2 salamanders from Ohio and Kentucky (162880).

MIZELLE, Prof. JOHN D., Notre Dame, Ind.: 18 slides of type material of helminths (162226).

MODERN PLASTICS MAGAZINE, New York, N. Y.: (Through Charles A. Breskin) 118 articles manufactured from various types of plastics, illustrating mainly the uses of plastics in defense materials and in replacing strategic metals; also 1 copy each of the November 1941 issue of Modern Plastics and the 1942 Plastics Catalog (162222).

MOECK, ARTHUR H., Milwaukee, Wis.: 22 specimens of Lepidoptera (160087, 161968).

MOLDENKE, Dr. HAROLD N. (See under U. S. Department of Agriculture, Soil Conservation Service.)

MONDOLFI, EDGARDO, Ithaca, N. Y.: (Through Harold Trapido) 1 salamander, type of a new species, from Venezuela (162419).

MONSOUR, EDWARD, Baton Rouge, La.: 4 species, 2 varieties of mollusks from the Oligocene and Eocene of the Gulf States (162692).

MONTANA STATE UNIVERSITY, Missoula, Mont.: 80 plants from Montana (162951, exchange).

MONTE, Dr. OSCAR, São Paulo, Brazil: 75 specimens of beetles (160341, 163121, exchanges).

MOORE, Dr. HILARY B., Bermuda: (Through Dr. T. Wayland Vaughan) 4 recent corals and 14 fossil corals from Bermuda (163030).

MOORE, Dr. RILEY D., Washington, D. C.: 1 pewter hornbook, dated 1729, and 1 hornbook made of oak, leather, and horn, undated (161452, loan).

MORAN, REID, La Canada, Calif.: 38 plants from California (161074).

MORAN TOWING & TRANSPORTATION CO., INC., New York, N. Y.: Three-fourth inch to 1-foot model of a harbor tug, the *Thomas E. Moran*, of 1938 (161120).

MORRISON, Dr. J. P. E., Washington, D. C.: 200 amphipods, 50 isopods, 2 shrimps, 7 cumaceans, 10 plus polychaete annelids and 300 mollusks (160370); approximately 31,000 land, fresh-water, and marine mollusks, also Amphibia, insects, Crustacea, etc., all from Ohio, Pennsylvania, Maryland, and Virginia, collected in 1940 and 1941 (160684); 3 crayfishes from Chesapeake Beach, Md. (160832); 1 shrew (162313).

MORTON, C. V., Washington, D. C.: 51 insects, comprising 21 Lepidoptera, 21 miscellaneous insects, 9 spiders, and 180 mollusks, collected in Cuba and Lower California by the donor (162072, 162201); 294 plants from California (161064); 273 specimens of mollusks (161969). (See also under Smithsonian Institution, National Museum.)

MOWRY, CHESTER A., Pawtucket, R. I.: 1 cultivated plant (161851).

MULFORD, FURMAN LLOYD, Silver Spring, Md.: Japanese sword and lacquered sheath (wood) acquired from a Mexican youth in Oaxaca, Mexico, in 1879; 2 specimens of scrimshaw work on sperm-whale teeth, 42 mollusks and 3 corals, 1 shark's tooth, piece of stalactite, a few fossil brachiopods, and 1 lot of miscellaneous minerals (160701).

MULLER, S. W. (See under Stanford University.)

MUNRO, J. A. (See under Pacific Biological Station.)

MUNZ, Dr. P. A., Claremont, Calif: 28 photographs of type specimens of plants (162549).

MURILLO, Dr. LUIS MARÍA, Bogotá, Colombia: 4 hymenopterous parasitic insects (161370).

MURRAY, Dr. LEO T. (See under Baylor University.)

MUSEO NACIONAL DE COSTA RICA, San José, Costa Rica: (Through Alfonso Segura P.) 59 specimens of Middle Miocene fossil shells from Costa Rica (163099).

MUSEUM OF NORTHERN ARIZONA, Flagstaff, Ariz.: (Through A. F. Whiting) 4 plants from Arizona (163024).

MYERS, EUNICE, Washington, D. C.: 1 mourning warbler (160910).

MYERS, FRANK J., Ventnor, N. J.: 35 slides of rotifers (161787).

MYERS, Dr. G. S. (See under Stanford University, Natural History Museum.)

MYLROIE, J. M. (See under Work Projects Administration, Graphic Services Section.)

NATIONAL AERONAUTIC ASSOCIATION, Washington, D. C.: Curtiss Marine Flying Trophy, with exhibition pedestal and case (162823, loan).

NATIONAL AUDUBON SOCIETY, New York, N. Y.: (Through Robert P. Allen) Collection of mollusks (157233).

NATIONAL HERBARIUM OF VICTORIA, South Yarra, Victoria: Specimen of grass from Australia (162085, exchange).

NATIONAL SPELEOLOGICAL SOCIETY, Washington, D. C.: (Through W. J. Stephenson) 50 mollusks, 43 bats, mammal bones, 3 salamanders, 20 Crustacea, 35 insects, etc. (160944, 161111, 161250, 161619, 162315, 162820, 163048).

NATLAND, M. L., Long Beach, Calif.: Type specimens of 2 California Pliocene Foraminifera (154496).

NAVY DEPARTMENT, Washington, D. C.:

Bureau of Aeronautics: Instruments, hook-on gear, 2 machine guns, and 1 rate of climb indicator for U. S. Navy airplane Curtiss "Sparrowhawk," type F9C–2, 15 specimens (161826).

Bureau of Ships: 1 wood sample of "albarco" from Colombia and 1 specimen of diabase (161491, 162138).

Naval Research Laboratory: (Through Dr. Samuel E. Pond) 200 specimens of mollusks from Virginia and North Carolina (163262).

NEBRASKA, UNIVERSITY OF, Lincoln, Nebr.: (Through Dr. Walter Kiener) 43 plants from Western United States (162964, 163247).

NEEDLER, Dr. A. W. H. (See under Atlantic Biological Station.)

NELSON, ELIAS, Yakima, Wash.: 1 cultivated plant (162224).

NEW JERSEY ZINC CO., New York, N. Y.: 8 transparencies illustrating steps in the refining of zinc (160444).

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 1 fern from Jamaica, 9 plants from South America, 8 photographs of type specimens of plants (136213, 160347, 161176, 162517, exchanges).

NEW YORK STATE COLLEGE OF AGRICULTURE, Ithaca, N. Y.: 60 plants from Western and Southern United States (161622, exchange); 46 plants (161874, exchange).

NEW YORK STATE COLLEGE OF FORESTRY, Syracuse, N. Y.: 787 woods collected with herbarium material by B. A. Krukoff, or under his direction, in Brazilian Amazonia during 1931–33 (162306, exchange).

NEW YORK STATE MUSEUM, Albany, N. Y.: Thin sections of 4 species of Devonian stromatoporoids from New York (163100).

NEW YORK ZOOLOGICAL SOCIETY, New York, N. Y.: 30 crabs, paratypes and topotypes (162126).

NICHOLS, JOHN T. (See under American Museum of Natural History.)

NICOLAY, ALAN S., Upper Montclair, N. J.: 1 beetle (162073).

NORTH CAROLINA STATE COLLEGE, Raleigh, N. C.: (Through Dr. B. B. Fulton) 4 locusts (161720, exchange).

NOYES, KATHERINE H. (deceased): (Through Charles T. Barber) Glazed Parian pitcher made by the U. S. Pottery, Bennington, Vt., about 1853 (162256, bequest).

NYLANDER, OLOF, Caribou, Maine: Specimen of primitive fossil plant from the Paleozoic rocks of Carlow Island, Maine (161970).

O'CONNOR, FRANK J. (See under Isabel Herrick Vickers.)

OEHLER, CHARLES, Cincinnati, Ohio: 5 ground squirrels and 8 beetles (161618, 161649).

OGDEN, Dr. E. C., Orono, Maine: 21 plants from the United States and Canada (163127).

OHIO STATE UNIVERSITY, Columbus, Ohio: (Through Dr. Alvah Peterson) 86 specimens of fly larvae, 18 species (162494).

OLD, Dr. MARCUS C., Hempstead, L. I., N. Y.: 15 slides of sponges, including types of 3 new species (161847).

OLMSTED, Dr. A. J., Washington, D. C.: 1 pictorial photograph of the United States Capitol and 1 stereoscopic flop shutter (160604, 160779). (See also under B. A. C. Craig.)

OLMSTED, HARRY H., Arlington, Va.: A radio tuner and a radio detector (161626).

OLMSTED, HELEN A., Washington, D. C.: 1 4×5 Poco-C plate and roll film camera, 4 plate holders, 1 roll holder, 1 exposure meter (162619).

OLOP, Capt. STEPHEN, Washington, D. C.: A piece of piling attacked by isopods (163073).

OLSEN, Prof. O. WILFORD. (See under U. S. Department of Agriculture, Bureau of Animal Industry.)

O'NEILL, Rev. Father HUGH, Washington, D. C. (See under Catholic University of America.)

OPDYKE, W. F., Cleveland Heights, Ohio: Plant from California (160686).

OSBORN, BEN, Weatherford, Tex.: 62 plants, mostly from Central United States (162579).

OSBORN, STELLA BRUNT, Poulan, Ga.: Photograph of Chase S. Osborn, Governor of Michigan 1911–12 (163059).

OSK, Mrs. M. L., New York, N. Y.: 35 prints, for exhibition during January 1942 (161765, loan); drypoint portrait of Harry Emerson Fosdick (162242).

OTOYA, Dr. FRANCISCO J. (See under Instituto de Ciencias Naturales.)

OWEN, JOHN R., Halstead, Pa.: 5 hair balls from cattle (163212).

PABST, Prof. A. (See under University of California, Department of Geological Sciences.)

PACIFIC BIOLOGICAL LABORATORIES, Pacific Grove, Calif.: (Through E. F. Ricketts) a collection of marine invertebrates (200 specimens); also a bat, 1 lot of parasitic worms, gordius worm and fishes, and 50 amphipods (159124, 160925).

PACIFIC BIOLOGICAL STATION, Nanaimo, British Columbia: (Through J. A. Munro) 5 specimens of mollusks (161976).

PALMER, Mrs. WILLIAM, Washington, D. C.: Ceremonially painted robe of dressed buffalo hide originally collected from a Plains Indian tribe, presumably the Comanche (162811).

PAN AMERICAN SANITARY BUREAU, Washington, D. C.: 2 opossums, 1 weasel, 3 house mice (160661).

PANAMA CANAL, Balboa, Canal Zone: (Through Paul H. Allen) 2 plants from Panama (160460).

PARDEE, FRANK, Hazleton, Pa.: Model of a lever adjustable spiral coal separator, marked "Anthracite Separator Co., No. 5, Hazleton, Pa., U. S. A." (162634).

PARKE, DAVIS & Co., Detroit, Mich.: 54 pharmaceutical preparations (160403); an 8-by-10-inch photographic print of percolation equipment for addition to the medicinal forms exhibit (160722).

PARKS, H. B., San Antonio, Tex.: 1 grass from Texas (161363).

PARODI, Dr. LORENZO R., Buenos Aires, Argentina: 16 grasses from Argentina (160987, exchange); 16 grasses from Argentina (161490).

PEARSE, Dr. A. S., Durham, N. C.: Mollusks, 11 fishes, echinoderms, and a small collection of marine invertebrates comprising approximately 50 shrimps, 2 cumaceans, 35 crabs, 10 stomatopods, 13 isopods, 24 callinassas, 200 hippas, and 139 amphipods (160881, 161538, 162102).

PEARSON, LEWIS V., Arlington, Va.: 7 mollusks from the Joseph Leiter Estate, Washington, D. C. (160352).

PECHUMAN, Dr. L. L., Medina, N. Y.: 8 flies, representing 7 species (162399, exchange).

PEIRCE, GERRY, Tucson, Ariz.: 33 etchings, for exhibition during February 1942 (162182, loan).

PENICK, S. B., & Co., New York, N. Y.: Plant (*Sarsaparilla* root) from Ecuador and 1 specimen each of the rhizomes of round turmeric and round zedoary (161254, 163194).

PENNELL, Dr. F. W. (See under Smithsonian Institution, National Museum.)

PENNSYLVANIA HISTORICAL COMMISSION, Harrisburg, Pa.: (Through Ross Pier Wright) 6 bones of the passenger pigeon from an archeological site at Westfield, N. Y. (161060).

PÉREZ, Dr. GILBERT S., Manila, P. I.: 4 land shells from the Philippine Islands (162432).

PERKINS, JOHN U., Washington, D. C.: 1 "Pathex" movie camera for 9.5 mm. film (163130).

PERRY, Dr. STUART H., Adrian, Mich.: 1 meteorite from Rose City, Mich. (161870).

PETERSON, Dr. ALVAH. (See under Ohio State University.)

PETRI, Prof. LEO H., Manhattan, Kans.: 2 type specimens of helminths (162042).

PETROLAGAR LABORATORIES, INC., Chicago, Ill.: 6 9″ x 11″ reproductions of original aquatints drawn and engraved by Rowlandson & Pugin (162179).

PHALEN, Mrs. JAMES M., Washington, D. C.: A collection of Hopi, Zuñi, and Apache baskets collected about 1892 (162527).

PHELPS, W. H., Caracas, Venezuela: 14 skins of birds from Venezuela, including 5 new to the collections (161024, 161298, 161,404, exchanges).

PHILADELPHIA CHILD HEALTH SOCIETY, Philadelphia, Pa.: 12 7″ x 8½″ food-value charts for use in the diet exhibit of the section of public health (162206).

PHILATELIC RESEARCH LABORATORIES, INC., New York, N. Y.: 10 volumes of photographs of the Edward S. Knapp Collection, Part 2 (161839).

PHILIPPI, Dr. R. A., Santiago, Chile: 1 chestnut-breasted babbler from Chile (161246).

PHILIPPINE NATIONAL HERBARIUM, Manila, P. I.: 5 grasses from the Philippine Islands (162841).

PHILLIPS UNIVERSITY, Enid, Okla.: (Through Dr. J. Clifford Shirley) 1,143 plants from Oklahoma (162438).

PICKEL, Dr. D. BENTO, São Paulo, Brazil: 182 plants from Brazil (160946, 161219, 162220, 162225).

PILSBRY, Dr. H. A. (See under Academy of Natural Sciences of Philadelphia.)

PITELKA, FRANK A., Berkeley, Calif.: 50 amphipods, 25 isopods, 5 shrimps, 2 mysids, and 1 ophiuran (160501, 160657).

PIZZINI, ANDREW, Washington, D. C.: 100 amphipods from Franklin, Idaho, and 25 from Maryland and District of Columbia (161071, 161918).

PLASKON CO., INC., Toledo, Ohio: A complete "Sonde-Track," a meteorologic instrument that automatically transmits by radio, when sent aloft attached to a balloon, the changes occurring in atmospheric pressure, temperature, and humidity; a photostat record made during one observation by the automatic radio receiver on the ground; and 10 specimens showing the application of plastics in the manufacture of the "Sonde-Track" (162632).

POLK, S. J. (See under K. E. Herde.)

POND, Dr. SAMUEL E. (See under Navy Department, Naval Research Laboratory.)

POOLE, Mrs. ARTHUR J., Washington, D. C.: 1 family portrait album of portraits collected by Maj. John Miller, U. S. A., of members of the 4th Infantry, to which he belonged; 1 copy of a newspaper "The Southern Reporter and Cork Commercial Courier," Cork, Ireland, issue for December 22, 1846 (162060).

POPULAR PHOTOGRAPHY, Chicago, Ill.: 101 salon prints—Third Annual Traveling Salon, exhibited during May 1942 (160800, loan).

PORTER, Dr. CARLOS E., Santiago, Chile: 3 fresh-water jellyfishes and 1 crustacean (162798).

POST OFFICE DEPARTMENT, U. S., Washington, D. C.: 12 sets of specimen stamps (1,286 specimens) received from the International Bureau and described in bulletins of that Bureau (160625, 161010, 161376, 161860, 162034, 162614, 163281); 3 copies each of the 10-cent, 30-cent, and 50-cent airmail stamp series of 1941 (161258, 161681).

POTZGER, Prof. J. E. (See under Butler University.)

PREBLE, EDWARD A., Washington, D. C.: 2 bat skeletons from Center Sandwich, N. H., collected in 1936 (161882).

PREFONTAINE, GEORGES, Montreal, Canada: 30 amphipods from the St. Lawrence River (162167).

PRICE, JOHN W., Lancaster, Pa.: About 25 amphipods (161539).

PRITCHARD, A. EARL, St. Paul, Minn.: 20 flies (155605, exchange).

PROCTOR, GEORGE R., Los Angeles, Calif.: 1 fern from California (162584).

PUFFER, CLARENCE C., West Bridgewater, Mass.: 56 mollusks from Florida (162800).

PUGH, Mrs. H. L., Bethesda, Md.: Lidded food bowl embossed with molluscan shell, collected on the Island of Yap (162852).

QUEENSLAND, UNIVERSITY OF, Brisbane, Queensland: (Through Prof. S. T. Blake) 234 grasses from Australia (162713, exchange).

QUENSEL, PERCY. (See under P. E. Wretblad.)

QUINTERO, LUIS CABRER, Habana, Cuba: 6 snails from Cuba (163117).

QUIRSFELD, EDWARD D., Hillsdale, N. J.: 1,602 beetles in the family Carabidae (161723); 49 beetles representing 4 families from Manchuria (161516).

RAPP, WILLIAM F., Jr., Chatham, N. J.: 30 miscellaneous insects (161614).

RASETTI, Dr. FRANCO, Quebec, Canada: 38 trilobites from the conglomerates at Levis, Quebec (162718); 131 Cambrian and Ordovician fossils from the Levis conglomerates at Quebec (162949); 27 specimens from the Levis conglomerates of Quebec and casts of type and 55 specimens of Cambrian fossils from the Canadian Rockies (163000).

RASMUSSEN, AXEL, Skagway, Alaska: 1 vial of weevils from Alaska (161094); male Tlingit skeleton from near Wrangell, Alaska (161346).

REEMTSMA, Mrs. PAULINE L., Fort Defiance, Ariz.: 1 red-and-white, double-weave coverlet, bearing the "Lion" trademark of the professional weaver, Harry Tyler, and the date 1842, made at Jefferson County, N. Y., for Alta S. Brewster, grandaunt of the lender (160442, loan).

REEVES, Prof. R. G., College Station, Tex.: 3 plants from Texas (161015).

REINHARD, Dr. E. G., Washington, D. C.: 15 barnacles from the coast of Maine and about 40 amphipods from the Arctic (162530, 162914).

REINHARD, H. J., College Station, Tex.: 2 flies (162230).

RESSER, Dr. CHARLES E. (See under Smithsonian Institution, National Museum.)

RHOADES, RENDELL, Wilmington, Ohio: 13 crayfishes, including types and allotypes of new species and 25 freshwater shrimps (144225, 158025, 162100).

RHOADES, WILLIAM, Indianapolis, Ind.: 1 specimen each of fossil coral and cephalopods from Indiana (161733, exchange).

RHODE ISLAND DEPARTMENT OF AGRICULTURE AND CONSERVATION, Kingston, R. I.: (Through Cedric Jennings) 8 beetles (160653).

RICH, H. R., Columbia, S. C.: 1 weevil (161776).

RICHARDS, Dr. A. GLENN, Jr., Philadelphia, Pa.: 10 specimens of Lepidoptera (161509).

RICHARDSON, Mrs. E. C. Washington, D. C.: (Through W. H. Egberts) A collection of 8 examples of woven beadwork from the Chippewa Indians, White Earth Reservation, Minnesota (163268).

RICHMOND, NEIL D., Lanexa, Va.: 2,550 land and fresh-water shells from Virginia, West Virginia, Montana, and Utah; 21 insects from Virginia and West Virginia; 124 Pleistocene mollusks and a piece of rock with Permian fossils from West Virginia (156090, 156477, 160490, 160989).

RICKER, P. L., Washington, D. C.: 12 plants from New York and Pennsylvania, 2 from Florida, and 3 from Maine (161436, 161489, 161907, 162791).

RICKETTS, E. F., Pacific Grove, Calif.: 570 mollusks from the Gulf of California, 124 marine invertebrates, fishes, and echinoderms (159723, 160366, 161743, 162291). (See also under Pacific Biological Laboratories.)

RIORDAN, DAVID, Washington, D. C.: A carriage jack, used from about 1903 or 1904 to 1916 (161899).

RITCHER, Dr. P. O. (See under University of Kentucky.)

ROBBINS, G. THOMAS, Boulder, Colo.: 4 plants (161695).

ROBERTS, Prof. J. HARVEY. (See under Louisiana State University.)

ROBERTS, R. B., Brooklyn, N. Y.: 2 baskets, 1 twined, 1 coiled, made by Indians in the vicinity of Portland, Oreg., about 1855–1860 (160486).

ROBERTSON, J. A., Baxter Springs, Kans.: Fluorescent calcite with galena and sphalerite from Sunny Boy Mine, Baxter Springs (160851).

ROBINSON, C. H., Hyattsville, Md.: 2 specimens of spherosiderite from Dixie, Wash. (160390).

ROBINSON, J. M., New York, N. Y.: 1 great blue heron (161023).

ROBINSON, POLLY SHUMAN, Falls Church, Va.: Female skull without lower jaw from Tampa district, Fla. (161066).

ROBSON, Mrs. ELINOR D., Balboa Heights, Canal Zone: 262 marine shells from the Bay of Panama, 54 corals, and a collection of marine invertebrates (160518, 161887).

ROCHESTER, UNIVERSITY OF, Rochester, N. Y. (Through Dr. Richard M. Goodwin) 31 plants from the United States (160627, 161656).

ROCK, Dr. JOSEPH F., Likiang, China: 60 plants (lichens) mainly from the Hawaiian Islands (83973).

ROCKEFELLER FOUNDATION, New York, N. Y.: (Through Ernest G. Holt) 453 birds from Brazil (159923, 161537).

International Health Division: (Through Dr. W. V. King) 496 mosquitoes, representing 26 species, 5 by types and paratypes mostly from the Philippines (160397); (through Dr. Henry W. Kumm) 118 specimens of mosquitoes representing 50 species from Costa Rica, 5 from British Honduras, and 27 from El Salvador (160888).

ROEBLING FUND, Smithsonian Institution: 1 tektite specimen from Beckham County, Okla. (160235); 1 specimen of Plainview meteorite (160733); 2 specimens of diaboleite and 1 of diaboleite and cerussite from Arizona (160736); 1 specimen of Wathena, Kans., meteorite (160876); 1 slice of the Potter, Nebr., meteorite (161206); 1 etched aquamarine from Aqua Preta, Minas Geraes, Brazil (161448); the Carleton meteorite (161475); 1 crystal of lithiophilite from Newry, Oxford County, Maine (161621); 1 stony meteorite from Howard County, just east of Boelus, Nebr. (161677); 5 mineral specimens, including dioptase, linarite, etc., from Mammoth Mine, Ariz. (161756); 1 green crystallized turquoise from Lynch Station, Va. (161809); 1 specimen of sepiolite from Madagascar (161808); 1 shattuckite and one diaboleite from Mammoth Mine, Ariz. (161827); 1 piece of andalusite (rough) from Jepuitinhonha River, near Itapore, Minas Geraes, Brazil (161901); 1 monazite crystal from Municipio do Ferros, Minas Geraes, Brazil (161938); 1 specimen of andradite garnet from Stanley Peak, Ariz. (162143); 1 specimen each of cosalite and galenobismutite from Cariboo District, British Columbia, and ferberite from Lequepalca, Bolivia (162136); a collection

of minerals, 121 specimens, from Mammoth Mine, Tiger, Ariz. (163210). (See also under Alfred M. Buranek.)

ROHM & HAAS CO., INC., Philadelphia, Pa.: A transparent nose section made of the acrylic resin "Plexiglas" used as an antenna housing on the Hudson bomber; a series of 8 photographic enlargements illustrating the manufacture of the nose section of a Martin B-26 bomber; and 11 specimens illustrating the manufacture, properties, and applications of the acrylic resin "Plexiglas" and the acrylic resin molding powder "Crystalite" (161846).

ROOSEVELT, President FRANKLIN D., Washington, D. C.: (Through W. A. Bartos) 1 eelpout (mother-of-eels) collected by President Roosevelt in a bay of Nova Scotia, August 9, 1941 (160906). (See also under Holland-America Line.)

ROOSEVELT, Mrs. FRANKLIN D., Washington, D. C.: A light slate-blue silk crepe gown worn by Mrs. Roosevelt at the inauguration of her husband, President Franklin D. Roosevelt, in 1933 (162687).

ROSENGURTT, BERNARD, Estación Juan Jackson, Uruguay: 47 plants from Uruguay (160038, 160497, 161228); 16 grasses from Uruguay (162054, exchange).

ROWLAND, Mrs. HENRY A., Baltimore, Md.: Hunting costume and infant's clothing worn by Dr. Henry A. Rowland, American physicist (162776).

RUNGE, Dr. OTTO, Wilmington, Del.: 2 specimens of mcgovernite from Sterling Hill, N. J. (161391).

RUNYON, ROBERT, Brownsville, Tex.: 37 plants from Texas (160319, 160656).

RUSSELL, PAUL, Washington, D. C.: (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

RUTGERS UNIVERSITY, New Brunswick, N. J.: (Through Prof. M. A. Chrysler) Specimen of fern (162297, exchange).

RUTH, CHARLES H., Jr. (See under Evening Star Newspaper Co.)

SABIN, Mrs. OGDEN, Summit, N. J.: Photograph of M. Pasteur and his granddaughter (163147).

SAFFIR, Dr. J. A., Chicago, Ill.: A Coolidge tube of the type used in early, oil immersed, medical X-ray apparatus (160404).

SAFFIR, Dr. and Mrs. J. A., Chicago, Ill.: 1 "Rachel's Red String" and an old medical glass vacuum X-ray tube (161371).

SAILER, REECE I. (See under University of Kansas.)

ST. JOHN, Dr. EDWARD P., Floral City, Fla.: 10 ferns from Florida (162333, 162468).

SALISBURY, H. S., San Rafael, Calif.: Specimens of fossil sharks' teeth from Illinois and echinoids from the Pacific coast (160189, exchange).

SALTAS, PETE. (See under Joseph Burger.)

SALTER, WILLIAM E., Washington, D. C.: Approximately 500 mollusks from Colorado, New Mexico, and Oklahoma (161408); 3 glass bottles from abandoned town of Estey, New Mex. (161741); 1 mollusk and marine worms from Chesapeake Bay, Md. (163028).

SANTOS, JOSÉ V., Ann Arbor, Mich.: (Through Mrs. Agnes Chase) 375 grasses from Mexico (162526).

SARGENT, F. H., Mobile, Ala.: 1 grass from Alabama (161775).

SARLES, E. H., Norwood, Ohio: 3 lots of allophane and clay from Indiana (160850).

SAWAYA, Dr. PAULO, São Paulo, Brazil: 1 crustacean (163003).

SCHAAL, Dr. LAWRENCE A., Greeley, Colo.: Collection of slides of diatoms (type material) (161685).

SCHALLERT, Dr. P. O., Winston-Salem, N. C.: 27 plants from the United States and Mexico (160856).

SCHECHTER, Prof. VICTOR, Pensacola, Fla.: 67 mollusks, mostly from Florida and Louisiana (162929, 163131).

SCHEFFER, Dr. V. B., Seattle, Wash.: 1 amphipod from Witheroe's Cave, Bath County, Va., March 22, 1941 (161921).

SCHELLBACH, LOUIS. (See under U. S. Department of the Interior, National Park Service.)

SCHERY, ROBERT W., St. Louis, Mo.: 2 plants from Mexico (161126).

SCHILLER, ALBERT, Brooklyn, N. Y.: 5 type pictures, 18 examples of fine printing, and 1 cartoon in type (162402).

SCHMITT, Dr. WALDO L., Washington, D. C.: Approximately 1,000 copepods, 30 crabs, 30 shrimps, 15 amphipods, 6 polychaete worms, 2 other worms, and a few fishes and mollusks (161230). (See also under Lincoln Ellsworth.)

SCHROEDER, WILLIAM C. (See under Harvard University, Museum of Comparative Zoology.)

SCHWARZ, ESTATE OF Dr. EUGENE AMANDUS: (Through H. S. Barber) Zeiss microscope No. 8947 used by Dr. Schwarz and probably brought by him from Germany about 1876 (162080).

SCHWENGEL, Mrs. F. R., Scarsdale, N. Y.: 5 mollusks from Florida (162570).

SCOTT, F. T., Visalia, Calif.: 5 beetles (161445).

SCRIPPS INSTITUTION OF OCEANOGRAPHY, La Jolla, Calif.: 7 isopods and 1 bryozoan collected by Dr. Olga Hartman (148198).

SCULLY, Dr. FRANCIS J., Hot Springs, Ark.: 14 plants (160401).

SEEVERS, Dr. CHARLES H., Chicago, Ill.: 13 beetles, representing 4 species, 2 of which are represented by 11 paratypes (160719, exchange).

SEGURA P., ALFONSO, San José, Costa Rica: 1 specimen of native copper from Puriscal, Costa Rica (161843). (See also under Museo Nacional de Costa Rica.)

SHAMEL, H. HAROLD, Washington, D. C.: 6 bats (162316).

SHAMP, GRACE, East Toledo, Ohio. (See under Samuel and Theresa Eland.)

SHAW, GEORGE W., Bozeman, Mont.: 1 specimen of staurolite from Montana (160315).

SHELBY, Dr. EDMUND PENDLETON. (See under Mrs. Gertrude Mathews Shelby.)

SHELBY, Mrs. GERTRUDE MATHEWS, Venice, Fla.: (Through Dr. Edmund Pendleton Shelby) 1 wooden stool from the Morroquoir Indians of Dutch Guiana (161703, bequest).

SHERWIN-WILLIAMS Co., Philadelphia, Pa.: (Through L. S. Stevens, Jr.) 9 silk screen stencil prints loaned for special exhibition during October 1941 (161352, loan).

SHILLER, Dr. IVAN. (See under U. S. Department of Agriculture.)

SHIRLEY, Dr. J. CLIFFORD. (See under Phillips University.)

SHOEMAKER, ERNEST, Brooklyn, N. Y.: 29 beetles (162229).

SHREVE, H. I., Brushy Run, W. Va.: 1 big-eared bat from Cave Mountain Cave, Brushy Run, Pendleton County, W. Va. (160261).

SIEBERT, Dr. FRANK, Merion Station, Pa.: 1 kingbird (160396).

SIKORSKY, I. I., Stratford, Conn.: 4 enlarged mounted photographs of the VS-300 helicopter, holder of the international endurance record for its type: 1 hour 32 minutes 26.1 seconds (160337).

SILBAUGH, R. A., Washington, D. C.: 1 black-billed cuckoo (161072).

SIMMONS, WILL, New Milford, Conn.: 1 drypoint map of Judds Bridge, and vicinity, near New Milford, Conn. (160639).

SIMPSON, WILLIAM G., Saratoga, N. Y.: Michigan motor-vehicle license plate No. 5, issued to donor in Detroit in 1905 for a gasoline automobile, said to be the first license issued for a car owned in Detroit (155078).

SKINNER, WILLIAM, & SONS, New York, N. Y.: 2 pieces of viscose rayon satin used for lining the coats and overcoats of regular Army uniforms; 1 specimen of "tackle twill," a specially woven, viscose rayon, cotton-backed, satin fabric, prepared as uniform material for the First Parachute Division of the U. S. Army; and a framed, colored, allegorical picture of the 501st Parachute Battalion, in training at Fort Benning, Ga., enlarged from a section of a moving picture film (160439); a specimen of silk "escape parachute cloth," or "canopy cloth," and a specimen of silk "parachute flare cloth" (161884).

SLOCUM, H. JERMAIN, Charleston, S. C.: Male Indian skeleton with fragmentary skull from Orwell Township, Vt. (opposite Fort Ticonderoga) (161940).

SMITH, CHARLES F., Kingston, Pa.: 7 specimens of fossil footprints (161279, exchange).

SMITH, Mrs. HERMA R., Portland, Maine: 4 old Indian baskets, 1 each from the Hupa, Tulare, Yakutat, and Aleut Indians (161953).

SMITH, JESS, Soquel, Calif.: 3 plants (160955).

SMITH, LOWELL, Washington, D. C.: 1 European stoat mounted in London about 1835 (161109, deposit).

SMITH, MAXWELL, Lantana, Fla.: 9 mollusks, 2 from the Dominican Republic and 7 from Belle Glade, Fla. (162727).

SMITH, Mr. and Mrs. S. P., Arlington, Va.: 2 silk screen stencil prints, for special exhibition during October 1941 (161350, loan).

SMITHSONIAN INSTITUTION, Washington, D. C.: 1 copper plate, etched with a drawing of a squirrel by R. Metzeroth after J. H. Richard (see Pacific R. R. Exped. and Surv. 74th Parallel, Mammals, plate 7) and 1 steel plate, etched with a drawing of "Military Plaza, San Antonio, Texas," by James D. Smillie after Arthur Schott (plate stamped on reverse "John Sellers, Sheffield") (160764, deposit); 7 prints, including 1 etching by Deville, 3 etchings by Giroux, 1 lithograph by Bahuet, 1 mezzotint engraving by Earlom, and 1 photographic print, unsigned

(161755, deposit); photophonic and phonographic experimental material with drawings and notes deposited in 3 boxes in the Smithsonian Institution in 1880 and 1881 by Alexander G. Bell, Chichester Bell, and Sumner Tainter (162298, deposit); 1 etching, "Concarneau," by Gordon Grant, Associate Member print of the Society of American Etchers (163170, deposit); (through Mary Vaux Walcott) a collection of 2 Mexican, 1 Zuñi, and 14 Navajo blankets; 21 Navajo and Zuñi Indian bead necklaces, 2 Chinese bead necklaces, and 1 amber bead necklace, 1 alexandrite pin, 1 pearl necklace, 15 mineral necklaces, 12 assorted necklaces (160986, deposit), and 1 can 6½" x 8½" "Satista" platinum paper, 1 box "Satista" clearing salts, dated December 13, 1916 (162793, deposit). (See also under Civil Works Administration.)

Bureau of American Ethnology: Cult objects from voodoo shrines in the region of Croix des Bouquets near Port-au-Prince, Haiti, and a small lot of archeological objects from Tortuga Island off the north coast of Haiti, collected by Dr. A. Métraux during the summer of 1941 (161294); archeological materials from Ventra, Santa Barbara, Mono, Inyo, and Kern Counties, Calif., collected by Dr. W. D. Strong in 1934 (162205). (See also under Civil Works Administration.)

National Museum, collected by members of the staff: Brown, W. L., 1 Alaska ptarmigan (162400); Chapin, Dr. E. A.: 7,600 insects, comprising 1,600 ants, 5,500 termites, 500 miscellaneous insects, 2 lizards, and small collection of Crustacea, from Island of Jamaica, 1941 (159613); 2,000 miscellaneous insects from Colombia, during February and March 1942, 800 of them a gift from the Colombian Government (162611). Cooper, Dr. G. Arthur: 20,000 specimens of Ordovician, Devonian, Mississippian, Pennsylvanian and Permian invertebrate fossils from Texas and Oklahoma (161469). Gazin, Dr. C. L.: 120 lots of fossil mammal specimens from the Bridger Eocene and Wasatch beds of Bridger Basin, and other localities in Wyoming, collected during the summer of 1941 (159612). Killip, E. P., and Dr. F. W. Pennell: 26 plants from Colombia (161046). Morton, C. V.: 6,006 plants from Cuba (162050). Resser, Dr. Charles E.: About 7,500 Cambrian and 500 Devonian invertebrate fossils collected in Montana, Utah, and the Canadian Rockies, during the summer of 1941 (161557). Stewart, Dr. T. D.: Archeological materials from an Indian village site of Patawomeke, on Marlboro Point, Va. (162075). Watkins, William N.: Trunk sections of common crapemyrtle from premises at 804 Independence Avenue, SW., Washington, D. C., collected on May 25, 1942 (163270). Superintendent's Office: An early model bipolar motor used in the old Museum printing shop (162824). Division of Marine Invertebrates: 2 portable microscopes, 2 microtomes, 1 apparatus for mounting microscope slides (163004). Property Office: 1 5-x-7 identification camera, Folmer & Schwing, 1 Unar Lens, F. 6.8 7" No. 803008 (160602).

National Museum, obtained by purchase: 43 specimens from the Aymara Indians, Lake Titicaca, Peru; textiles, pottery, musical instruments (158575); 3 gold ornaments from Costa Rica, including one from El General (160436); 800 plants from the Western United States (160737); 6 mammals and 3 birds from Manchuria (160839, 161218); 5 sets of birds' eggs and 2 nests (160952); 4 skins of birds from Ecuador (161411); 25 specimens of mosses (161906); 6 cystids and 2 blastoids from the Trenton and Devonian rocks of Canada (161426); 23 bird skins and 46 mammal skins from Manchuria (162111, 162869).

National Museum, Photographic Laboratory: 2 rock salt lenses; 6 5 x 6 Scoville Dry Plates; 1 Emil Busch Pantoscope Lens, 1 Ross lens, No. 25479, and 1 Ross lens, No. 42665, obsolete material (161183).

National Zoological Park: 52 mammals, 44 birds, 91 bird skeletons, 92 reptiles (160903, 161200, 161569, 162312, 162572, 162952, 163049, 163187, 163193); 1 skin and skull each of an otter, ground squirrel, ringtail, and wolverine (163219).

SMITHSONIAN INSTITUTION – NATIONAL PARK SERVICE EXPEDITION: Sloth dung and miscellaneous bones from Rampart Cave; mammals, birds, reptiles, fishes, plants, and insects from Boulder Dam National Recreational Area, Mohave County, Ariz., collected by Dr. Remington Kellogg and Watson M. Perrygo (161594).

SNYDER, Miss V. E., Brooklyn, N. Y.: A Swiss music box and a collection of American water-heating devices (162289).

SOCIETY FOR VISUAL EDUCATION, INC., Chicago, Ill.: 3 copies of the strip film "Red Blood" for use in the delineascope in the Section of Public Health (163069).

SOCIETY OF WASHINGTON ETCHERS, Washington, D. C.: 75 mats containing prints, 50 of which were included in the special exhibition of the Society during April 1942 (162902, loan).

SODESTROM, ROBERT T., Glendale, Calif.: A polished slab of fossil elm from the petrified forest of Mojave Desert (162906).

SOLEMAN, FRED A., Tama, Iowa: A strip of woven beadwork from the Sac and Fox Indians, Tama, Iowa (162788).

SOOP, CHARLES WILLIAM, Baltimore, Md.: Engraved portrait of Brig. Gen. James B. McPherson, from the original painting by Nast, 1865 (161480).

SORENSEN, A., Pacific Grove, Calif.: 3 plus fiddler crabs and 3 mollusks (160178, 162461, 162862). (See also under Chester Giamonco.)

SOUKUP, J., Lima, Peru: 457 tenebrionid beetles, collected in Peru (152292).

SOUTHWEST MUSEUM, Los Angeles, Calif.: 1 Samoan fire fan woven of palm leaves (162286).

SOXMAN, G. M., Dallas, Tex.: 16 plants from Texas (160459, 161546).

SPEER, GEORGE W., Waterloo, Ind.: Half propeller and wing skid from plane flown by Art Smith (162319).

SPERRY, Dr. OMER E., Alpine, Tex.: 161 plants from Texas (162610).

SPICER, Capt. JAMES K., Taylors Island, Md.: 6 original designers' half models of vessels built at Taylors Island by Joseph T. Spicer, father of the donor (163249).

SPICER, Dr. V. D., Honolulu, Hawaii: About 1,600 mollusks from the Hawaiian Islands and about 700 from Midway and Wake Islands (160393, 160999, 161348, 161517).

SPINDLER, L. A. (See under U. S. Department of Agriculture, Bureau of Animal Industry.)

SPRINGER FUND, Smithsonian Institution: 2 exhibition slabs and 35 specimens of crinoids from the Mississippian, Gilmore City limestone, Gilmore City, Iowa (161449).

SPUBLOCK, G. M., Davis, Calif.: 5 feather mites (157907).

STANFORD, L. R., Seattle, Wash.: 122 plants from Mexico (161544, 162470).

STANFORD UNIVERSITY, Calif.: 693 specimens of plants from Mexico and Lower California (161280, 161300, exchanges); 1 marine mollusk (162103); (through Dr. Walter K. Fisher) 14 plus specimens of sipunculids, including types of 3 new species (162139, exchange); (through Dr. G. S. Myers) 5 fishes, including 2 paratypes (159464, 160922, 161278, exchanges); (through S. W. Muller) topotypes and other specimens of Upper Cretaceous invertebrate fossils from California — 20 specimens (160387, exchange).

STEARNS, J. L., Laurel, Md.: 21 plants and collection of woods mostly from Florida (161032); wood samples of Corkwood and three species of Locust (163186).

STEARNS, RICHARD E., Baltimore, Md.: Potsherds, clay pipe, quartz arrowpoint and drill fragment, etc. from site overlooking Tar Cove, on Magothy River, Anne Arundel County, Md. (163264).

STEPHENSON, Dr. K., Copenhagen, Denmark: 12 amphipods (161964, exchange).

STEPHENSON, Dr. L. W., Washington D. C.: 11 fresh-water mussels from Texas (161447). (See also under U. S. Department of the Interior, Geological Survey.)

STEPHENSON, W. J. (See under National Speleological Society.)

STEVENS, L. S., Jr. (See under Sherwin-Williams Co.)

STEVENSON, JOHN A. (See under Dr. Charles Thom.)

STEWART, Mrs. LEE M., Waycross, Ga.: (Through Dr. Doris M. Cochran) A spinning stick, originally owned by the lender's great-grandmother, Mrs. Preshey (George) Perkins, Jefferson County, Ala., and used instead of the forefinger, to drive the wheel while spinning on a great wheel (163071, loan).

STEWART, Dr. T. D. (See under Smithsonian Institution, National Museum.)

STEYSKAL, GEORGE, Detroit, Mich.: 3 flies, holotype and 2 paratypes, of a new species (161249).

STIMSON, Dr. A. M., Chevy Chase, Md.: 5 hummingbirds and 1 tanager (161704).

STOCKTON, SAMUEL W., Buffalo, N. Y.: 17 corals and brachiopods from the Devonian near Buffalo (162729, exchange).

STONE, Dr. ALAN, Washington, D. C.: 50 fresh-water shells from Georgia, Alabama, South Carolina, and Virginia (160509).

STONE, Mrs. LOUISE B., Washington, D. C.: 7 sand-dollars from Pas-a-Grille Beach, Fla. (163103).

STORM, MARIAN, Mazatlan, Sinaloa, Mexico: 3 plants from Mexico (160884, 161180).

STOTTLEMEYER, MARGARET A. R., Washington, D. C.: A flint, clear-glass decorated dish and a boat-shaped salt cellar from the Sandwich factory, also a lidded stoneware cup (162177).

STRIMPLE, HARRELL L. (See under Don M. Tyler.)

STRIMPLE, Mrs. MELBA, Bartlesville, Okla.: 4 crinoids from the Mississippian and Pennsylvanian rocks of Oklahoma (161858, exchange).

STROHECKER, Prof. H. F., Gambier, Ohio: 17 beetles representing 13 species, 3 of which are represented by paratypes (161216, exchange); 11 beetles (161811).

STULL, W. D., Fayette, Mo.: 2 dermal tubercles from the Pennsylvanian near Fayette (162624).

SULLIVAN, Prof. J. MAGRUDER, Jackson, Miss.: 3 specimens of zeuglodont material from the lower Jackson formation of Mississippi (133618, deposit); skull of Titanothere from Jackson formation of Mississippi (160880, deposit).

SVRCEK, EDWIN R., Austin, Tex.: 2 lots of planarian worms (159544).

SWALLEN, J. R. (See under U. S. Department of Agriculture.)

SWINGLE, Prof. H. S., Auburn, Ala.: 6 earthworms (139779).

TALBOT, Mrs. M. W. (See under Dr. C. Hart Merriam.)

TALLMAN, Dr. M. H., Miami, Fla.: 2 oysters from the Florida reefs (161701).

TANNER, Dr. VASCO M. (See under Brigham Young University.)

TAYLOR, WALTER W., Jr., Cambridge, Mass.: 46 mollusks from kitchen middens from Coahuila, Mexico (162071).

TAYLOR, Dr. WILLIAM RANDOLPH, Ann Arbor, Mich.: 63 samples of washings from algae (159992); 7 bottles of washings, 6 crabs, 1 alcyonarian, from Haiti (161800).

TELEPHONE CAMERA CLUBS, New York, N. Y.: 50 pictorial photographs for exhibition during March, 1942 (162496, loan).

TEMPLE, GRACE L., Washington, D. C.: Barbe of black Chantilly lace (163324).

TEXAS, UNIVERSITY OF, Austin, Tex.: 3 specimens of insects (161896, exchange).

THAANUM, D., Honolulu, Hawaii: 15 mollusks from Hawaiian Islands (160735). (See also under Dr. C. M. Burgess.)

THATCHER, T. O., Pacific Beach, Calif.: 9 beetles, comprising type and 2 paratypes of 1 species, and type, allotype and 4 paratypes of another species (160385). (See also under U. S. Department of the Interior, National Park Service.)

THOM, Dr. CHARLES, Washington, D. C.: (Through John A. Stevenson) 46 plants from New York (163146).

THOMPSON, Mrs. R. W., Washington, D. C.: Mollusks, echinoderms, crustaceans, and corals from Tutuila, Samoa (161123).

THOMPSON PRODUCTS, Inc., Cleveland, Ohio: A copy of the Thompson Trophy; a complete collection of 10 model airplanes, representing winners of this Trophy 1929–1939; and a series of 11 colored prints and 44 black-and-white drawings by Charles Hubbell, illustrating winners and selected group of entrants in each annual race for the Trophy; 66 specimens in all (160305).

THORNLEY, GERTRUDE, Lidcombe, Australia: 290 mollusks, chiefly marine, from Australia (158618, exchange).

TICHENOR, Mrs. IDA M., Princeton, Ind.: (Through V. L. Beatty) Quaker hat (162437).

TISSOT, Dr. A. N. (See under Florida Agricultural Experiment Stations.)

TOMÁS, Brother ALBERTO, Yarumal, Antioquia, Colombia: 18 plants from Colombia (162036).

TONANDER, JOHN F., Bismarck, N. Dak.: 1 crab and 1 pelecypod from the Pierre shale of North Dakota (162817).

TOSH, JOHN PAUL, Beckley, W. Va.: 210 plants from West Virginia (160967, 161736).

TOULMAN, Dr. LYMAN, Jr., College Station, Tex.: 54 species of Foraminifera from the Eocene, Salt Mountain limestone, Alabama (162569).

TOWLES, WILL, Bethesda, Md.: 59 portraits for exhibition during June 1942 (163152, loan).

TOWNSEND, Dr. C. H. T., São Paulo, Brazil: 191 flies, types and paratypes, 98 of which are holotypes and genotypes of genera recently described by Dr. Townsend and mainly from Brazil (160384).

TRAPIDO, HAROLD. (See under Edgardo Mondolfi.)

TRAYNHAM, Dr. B. L., Sweet Springs, W. Va.: (Through Dr. H. S. Ladd) a coiled cephalopod from the Canadian rocks near Sweet Springs, W. Va. (161405).

TREASURY, U. S. DEPARTMENT OF THE;
Bureau of the Mint: 3 California gold tokens struck in 1856 and 1858 (161737); (through Edwin H. Dressel) 30 U. S. bronze, nickel, and silver coins struck in 1941 (162476)
Procurement Division: A 3-light gas chandelier, remodeled for electric light, originally installed in the White House, transferred to the Soldier's Home Hospital, Mountain Home, Tenn., in 1903 when the White House was remodeled, and turned in to Procurement Division, Treasury Department, by the U. S. Veterans Administration in 1941 (160511).

TRENHOLM, E. L., Jackson, Miss.: 1 butterfly (161006).

TRUITT, Prof. R. V., Solomons Island, Md.: 8 shipworms and 50 amphipods (160761).

TULANE UNIVERSITY, New Orleans, La.: (Through Mrs. Frank G. Mackaness) 105 specimens of mosses and hepatics, from Louisiana (160848, exchange).

TURVER, Mrs. H. R., City of Santa Cruz, Calif.: 39 mollusks from Guaymas, Mexico (162761).

TYLER, DON M., Dewey, Okla.: (Through Harrell L. Strimple) 300 invertebrate fossils and shale with microfossils from the Dewey limestone of Oklahoma (161556).

TYRRELL, W. B., Takoma, Md.: 1 cardinal (162884).

UNDERWOOD & UNDERWOOD, New York, N. Y.: 68 photographic illustrations for special exhibition November 1941 (161520, loan).

UNDERWOOD-ELLIOTT FISHER CO., Washington, D. C.: (Through George H. Ward) 3 Underwood typewriters of 1897, 1914, and 1941, respectively, and a key action assembly of the 1897 model (161692).

U. S. INDUSTRIAL CHEMICALS, Inc., New York, N. Y.: An exhibit entitled "The Manufacture and Uses of Industrial Alcohol," consisting of a series of 3 lighted dioramas illustrating steps in the production of industrial alcohol, and 10 colored photographs illustrating some of its more important uses (161854).

U. S. INDUSTRIAL CHEMICAL, Inc.—Con.

UNITED STATES RUBBER CO., New York, N. Y.: Last white-sidewall automobile tire built by the United States Rubber Co., before the order of the Priorities Division, Office of Production Management, prohibiting the manufacture of this type of tire, went into effect August 23, 1941 (161112).

USINGER, Dr. R. L., Davis, Calif.: 13 insects, representing 7 species, of which 3 are represented by 5 paratypes; also 5 insects and 6 bugs (160405, 161041, 163023).

UTAH, UNIVERSITY OF, Salt Lake City, Utah: (Through Dr. Walter P. Cottam) 3 plants from Arizona (161672).

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah: 70 plants from Utah and Nevada (161612, exchange); (through Dr. G. F. Knowlton) 86 miscellaneous insects, representing 38 species, 31 of which are represented by 5 types and 66 paratypes (162789).

VALENTINE, Dr. J. M., Washington, D. C.: 120 specimens of bugs, mostly from Georgia (161142); 66 marine invertebrates from caves in the southern states (161464); 31 salamanders and 1 snake from Habersham County, Ga., collected in 1935 (162924).

VALERIO, Prof. MANUEL, San José, Costa Rica: 208 land and fresh-water shells from Costa Rica (145520).

VALERIO, R., Prof. JUVENAL, San José, Costa Rica: 2 insects (160379).

VANDERBILT UNIVERSITY, Nashville, Tenn.: 15 type and figured specimens of fossil turtles (162127, exchange).

VAN HYNING, T. (See under Florida State Museum.)

VAN WOERT, Mrs. M. P., St. Petersburg, Fla.: 2 mollusks from New Providence, Nassau (160478).

VARGAS, Dr. C., Cuzco, Peru: 37 plants from Peru (161862).

VARGAS, Dr. LUIS, Mexico, D. F.: 11 specimens of mosquitoes (159902, exchange).

VAUGHAN, Dr. T. WAYLAND. (See under Dr. Hilary B. Moore.)

VERRILL, A. HYATT, Chiefland, Fla.: 64 miscellaneous insects, 3 lizards, and 1 crustacean (160207).

VICKERS, ISABEL HERRICK (deceased), Washington, D. C.: (Through Frank J. O'Connor) 3 Oriental rugs—one "Yahmud-Bokhara," one "Kashmir," and one Persian designed "Khelim" (163154), bequest).

VIGNE, C., Sekondi, Gold Coast, West Africa: 63 plants from the Gold Coast (162285, 162850).

VINES, ROBERT A., Houston, Tex.: 4 plants from Texas (162456).

VIRGINIA FISHERIES LABORATORY, Williamsburg, Va.: (Through R. W. Menzel) 10 catfish from the Chickahominy River, Va. (161980).

VISEL, GLADYS O., Washington, D. C.: 1 olive-backed thrush (161329).

VOLLMER, ROBERT M., Dolgeville, N. Y.: 1 Philippine dagger captured at Baratoc Nuevo, Illoilo Province, Panay, P. I., in 1900 from a member of the Pulijani Society (161354).

VON HILLER, BARONESS EMILY, AND MRS. JOHN H. WHITTAKER, MRS. JOSEPH S. BUNTING, MRS. HENRY M. WATTS, AND MRS. ARCHIBALD B. HUBARD, Elkins Park, Pa.: Hat and coat owned by Jay Cooke (1821–1905) and framed photograph of Jay Cooke (160312).

VOUGHT-SIKORSKY AIRCRAFT, Stratford, Conn.: A model of the 4-engined airplane "Grand," designed by Igor I. Sikorsky and built in Russia in 1913 (162844).

WADE, DOUGLAS E. (See under University of Missouri.)

WAGGAMAN, MAJ. ENNALLS, Washington, D. C.: 1 musical instrument (zanze) from Victoria Falls, Rhodesia (161721).

WAGNER, W. H., Jr., Washington, D. C.: 2 ferns from Virginia (162158).

WAKEMAN, J. ALLISON, Basom, N. Y.: 1 insect (160662).

WALCOTT, MARY VAUX. (See under Smithsonian Institution.)

WALKER, Dr. E. H., Washington, D. C.: 726 plants from the Shenandoah National Park and Maryland (160389, 162475).

WALKER, J. B., Washington, D. C.: 112 plants from Texas (162548).

WALLACE, GEORGE E., Pittsburgh, Pa.: 16 paratypes of Hymenoptera (162515).

WALLEY, G. STUART. (See under Canadian Government, Department of Agriculture.)

WAR DEPARTMENT, Washington, D. C.: United States Army ¼ ton 4 x 4 Reconnaissance and Light Command Car, 1941, USAW 2017257, with accessories attached (160021, loan).

Army Air Forces: 36 photographs illustrating current types of Army airplanes (161414); (through Lt. C. M. Freeman) a painting, on Masonite 2′ square, of the insignia of the 8th Bombardment Squadron (L) Army Air Forces showing a spread eagle holding a Liberty Bell and imposed upon a white, green, and orange cocarde (162059); insignia of the 40th Pursuit Squadron showing the devil high in the sky against a cloud background hurling a lightning bolt with his right hand while he points his left hand at the enemy (162076).

Office of the Quartermaster General: 9 pairs of army footgear (161730, loan).

WARD, GEORGE H. (See under Underwood-Elliott Fisher Co.

WARD, Mrs. HERBERT S., Washington, D. C.: 2 mollusks from Cuba (161989).

WARDWELL BRAIDING MACHINE CO., Central Falls, R. I.: 1 reel of 5,000 feet of No. 18 lamp cord, uncovered, and 32 packages of glazed cotton yarn, yellow and green, for use in demonstrating the "Wardwellian" braiding machine (161891).

WARREN, Mrs. FISKE, Boston, Mass.: 1 marine mollusk from Japan (162255).

WASHINGTON, STATE COLLEGE OF, Pullman, Wash.: 452 plants from the Pacific northwest (162239, exchange).

WATKINS, WILLIAM N. (See under Smithsonian Institution, National Museum.)

WATTS, Mrs. HENRY M. (See under Baroness Emily von Hiller.)

WEBER, F. J., Jr., Washington, D. C.: 2 sharks from Virginia Beach, Va. (161186).

WEICK, FRED E., Riverdale, Md.: A scale model of the Weick W-1A experimental airplane (163195).

WEIDENER, REYNOLD H., Grand Rapids, Mich.: 35 mats containing prints for special exhibition during March 1942 (162903, loan).

WELDON, Mrs. W. C., Denver, Colo.: 1 Zoetrope with 32 strip pictures for same (160313).

WELLS, J. ROBERT, La Oroya, Peru: Fused right humerus and ulna from "site C" near Oroya, Peru (161852).

WEST VIRGINIA UNIVERSITY, Morgantown, West Va.: (Through Elizabeth Ann Bartholomew) Plant from West Virginia (160595, exchange); (through Dr. Earl L. Core) 1 plant from Cuba (162932, exchange).

WEST, W. C., Ephraim, Wis.: 4 pictorial prints (161705).

WETMORE, Dr. ALEXANDER, Washington, D. C.: A collection of 10 photographic prints from negatives taken by Willy Knutsen, of Angmagsalik Eskimo, East Greenland, in 1940 (160635). (See also under W. L. Abbott Fund.)

WHEELER, Prof. G. C., Grand Forks, N. Dak.: 1 slide containing trematode (161820).

WHEELOCK, Miss V. R., Freeport, L. I., N. Y.: 16 "basalt" ware cameos produced by Josiah Wedgwood after 1766 (163150, loan).

WHITCOMB, Prof. LAWRENCE, Bethlehem, Pa.: 1 lot of Ordovician bentonite from Reedsville, Pa. (162173).

WHITE, BURDETTE E., Merced, Calif.: 2 beetles (162930).

WHITE, Mrs. E. C., Washington, D. C.: 100 plants collected in Eastern United States (161984).

WHITEHOUSE, Prof. F. W., Brisbane, Queensland: 2 slabs and 7 specimens (topotypes) of Middle Cambrian echinoderms (161406).

WHITING, A. F. (See under Museum of Northern Arizona.)

WHITLOCK, Mrs. BRAND, Brewster, N. Y.: Replica of medal presented to General Lafayette by the Arrondissement of Meaux in 1830 (162203).

WHITTAKER, Mrs. JOHN H. (See under Baroness Emily von Hiller.)

WILLAMETTE UNIVERSITY MUSEUM, Salem, Oreg.: Male skull with lower jaw from the W. W. Poland mound near Shedd, Oreg. (159693, exchange).

WILLIAMS, M. W., Bradley Field, Conn.: 65 specimens of land and fresh-water shells from Connecticut (162459).

WILLIAMS, RAOULS, Sun City, Kans.: 1 bat (161872).

WILLIAMS, WOODBRIDGE, Windsor Locks, Conn.: 1 coral (161997).

WILLIS, Mrs. A. C., Washington, D. C.: Small collection of insects and sea-urchins from Lunenburg County, Nova Scotia (161182).

WILSON, CARROLL A. (See under Dr. Charles Branch Wilson.)

WILSON, Dr. CHARLES BRANCH (deceased), Westfield, Mass.: (Through Carroll A. Wilson) A comprehensive library of books and pamphlets on copepods (approximately 2,500 books and pamphlets); a safe-cabinet containing records of the species of copepods and the literature concerning them (thousands of reference cards); miscellaneous manuscript records; a small collection of miscellaneous invertebrates (160788, bequest).

WILSON, L. WAYNE, Moorefield, W. Va.: 4 lots of parasitic worms (161758).

WINDSOR, A. S., Chicago, Ill.: A small collection of ants from Rangoon, Burma (162710).

WING, MERLE W., St. Paul, Minn.: 79 miscellaneous insects (153686).

WINSLOE, JANET E., Toronto, Canada: 20 fragments of sponge (162223).

WINTHROP CHEMICAL CO., INC., New York, N. Y.: An exhibit illustrating the sources, functions, etc., of vitamins A, B_1 B_2, C, D, E, K, and nicotinic acid (32 specimens) (161990).

WIRTH, HENRY, Washington, D. C.: 22 specimens of radio apparatus, including several early radio receiving sets, an airplane radio transmitting set, 2 short-wave converters, and a number of early radio tubes (163277).

WOLF, Brother WOLFGANG, St. Bernard, Ala.: Plant from Alabama (161477).

WOLF MACHINE CO., Cincinnati, Ohio: An original portable, rotary-knife cloth-cutting machine manufactured under U. S. Patents 505689, 505690, and 528217. Also a straight-knife machine based on U. S. Patent 701910 granted June 10, 1902 (161272).

WOLFE, Lt. Col. L. R., Washington, D. C.: 9 bird skins from Manchuria (162058).

WOODSON, Dr. ROBERT E., Jr., St. Louis, Mo.: 47 plants from Panama (161540, 161867).

WOOTON, Dr. E. O., Arlington, Va.: 1 plant (alga) from Virginia (160963).

WORK PROJECTS ADMINISTRATION, Washington, D. C.: Archeological specimens representing the Smithsonian Institution's portion of W. P. A. project in Jefferson County, Mo. (84 specimens) (160182); 186 archeological specimens collected in 1936 under superivision of Preston Holder, from shell and sand burial mounds on the southeast shore of Tampa Bay, Hillsborough County, Florida (160905); 520 archeological specimens collected in winter of 1935–36 under supervision of D. L. Reichard from various mounds in Dade and Broward Counties, Fla., (161392).

Graphic Services Section, Silk Screen Unit: (Through J. M. Mylroie) 2 silk stencils and 14 silk stencil prints, all made by the W. P. A. (161608).

WRETBLAD, P. E., and PERCY QUENSEL, Stockholm, Sweden: Specimen of alemontite from Varuträsk, Sweden (160388).

WRIGHT, EDITH A., Washington, D. C.: 1 roto-intaglio of etching by Lionel Barrymore entitled "Quiet Waters" (163025).

WRIGHT, L. M., New York, N. Y.: 14 bivalves from Bermuda (162292).

WRIGHT, ROSS PIER. (See under Pennsylvania Historical Commission.)

WRIGHT, Dr. STILLMAN, Logan, Utah: 60 coregonid fishes collected in gill nets from Bear Lake, Idaho and Utah (161454).

WYETH, JOHN, & BRO., Inc., Philadelphia, Pa.: Reproduction of a painting in oil by Dean Cornwall, entitled "Conquerors of Yellow Fever" (162180).

WYLIE, MRS. GERTRUDE HULBERT, La Jolla, Calif.: A translation by Susana Winkworth of the old manuscript *Theologia Germanica*, with preface by the Rev. Charles Kingsley, printed by W. F. Draper, Boston, 1856 (161459); 1 paper prayer wheel or banner from China (162228).

YALE UNIVERSITY, New Haven, Conn.: 17 plants from Dominican Republic (160865, exchange).

Peabody Museum of Natural History: Slices of 28 species of fossils from the Middle Paleozoic of North America (163126, exchange).

School of Forestry: 34 plants from Brazil (163215).

YORKS, S. H. (See under Bethlehem Steel Co.)

YOUNG, Prof. B. P., Ithaca, N. Y.: 6 mollusks from Enfield Pond, Ithaca (160508).

ZELIFF, Prof. C. COURSON, State College, Pa.: 2 slides of trematodes, type and paratype (162563).

ZETEK, JAMES, Balboa, Canal Zone: (Through H. L. Andrews) 10 insects collected in Panama (160651).

ZOOLOGICAL RESEARCH SUPPLY, Englewood, Fla.: (Through Morris Fraser) 1 fish collected August 6, 1941, at Punta Gorda Beach, Lemon Bay, Fla., by John Bass, 3d (160705).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1941–42

REPORT

Report on the progress and condition of the United States National Museum for the fiscal year ended June 30, 1941. 8vo, iii+118 pp. January 1942.

BULLETINS

Bulletin 50, part 9. The birds of North and Middle America. Families Gruidae, Rallidae, Heliornithidae, and Eurypygidae. By Robert Ridgway and Herbert Friedmann. 8vo, ix+254 pp., 16 figs. October 2, 1941.

Bulletin 82, vol. 1, part 4a. A monograph of the existing crinoids. The superfamily Mariametrida (except the family Colobometridae). By Austin H. Clark. 4vo, vii+603 pp., 61 pls. August 5, 1941.

Bulletin 161, part 3. The Foraminifera of the tropical Pacific collections of the *Albatross*, 1899–1900. Heterohelicidae and Buliminidae. By Joseph Augustine Cushman. 8vo, x+67 pp., 15 pls. February 10, 1941.

Bulletin 177. The herpetology of Hispaniola. By Doris M. Cochran. 8vo, vii+398 pp., 12 pls. July 8, 1941.

Bulletin 178. Catalog of the type specimens of mammals in the United States National Museum, including the biological surveys collection. By Arthur J. Poole and Viola S. Schantz. 8vo, xiii+705 pp. April 8, 1942.

Bulletin 179. Life histories of North American flycatchers, larks, swallows, and their allies. By Arthur Cleveland Bent. 8vo, xi+555 pp., 70 pls. May 8, 1942.

PAPERS PUBLISHED IN SEPARATE FORM

FROM VOLUME 28, CONTRIBUTIONS FROM THE UNITED STATES NATIONAL HERBARIUM

Part 4. Plants collected by R. C. Ching in southern Mongolia and Kansu Province, China. By E. H. Walker. Pp. i–iii, 563–675, pls. 21–27. July 22, 1941.

FROM VOLUME 87 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i–viii, 635–672. September 16, 1941.

FROM VOLUME 90 OF THE PROCEEDINGS

No. 3107. Revision of the North American moths of the family Oecophoridae, with descriptions of new genera and species. By J. F. Gates Clarke. Pp. 33–286, pls. 1–48. November 6, 1941.

No. 3109. A history of the division of vertebrate paleontology in the United States National Museum. By C. W. Gilmore. Pp. 305–377, pls. 49–53. August 5, 1941.

No. 3110. A new harpacticoid copepod from the gill chambers of a marsh crab. By Arthur G. Humes. Pp. 379–385, fig. 18. August 5, 1941.

No. 3112. Cestode parasites of teleost fishes of the Woods Hole region, Massachusetts. By Edwin Linton. Pp. 417–442, pls. 60–62. July 15, 1941.

No. 3113. Pamlico fossil echinoids. By Willard Berry. Pp. 443–445, pls. 63–65. July 5, 1941.

No. 3115. Notes on Mexican turtles of the genus *Kinosternon*. By Leonhard Stejneger. Pp. 457–459. July 25, 1941.

No. 3116. A revision of the chalcid-flies of the genus *Monodontomerus* in the United States National Museum. By A. B. Gahan. Pp. 461–482. August 19, 1941.

No. 3117. Notes on the birds of North Carolina. By Alexander Wetmore. Pp. 483–530. October 31, 1941.

No. 3118. Notes on some North and Middle American danaid butterflies. By Austin H. Clark. Pp. 531–542, pls. 71–74. November 4, 1941.

No. 3119. A new genus of psammocharid wasp from China. By P. P. Babiy. Pp. 543–546, fig. 23. October 24, 1941.

No. 3120. Two new species of cecidomyiid flies from *Phlox*. By Charles T. Greene. Pp. 547–551, fig. 24. October 30, 1941.

FROM VOLUME 91 OF THE PROCEEDINGS

No. 3121. The mammalian faunas of the Paleocene of central Utah, with notes on the geology. By C. Lewis Gazin. Pp. 1–53, figs. 1–29, pls. 1–3. October 2, 1941.

No. 3122. A new fossil crocodilian from Colombia. By Charles C. Mook. Pp. 55–58, pls. 4–9. January 17, 1942.

No. 3123. The North American moths of the genus *Arachnis*, with one new species. By J. F. Gates Clarke. Pp. 59–70, pls. 10–12. November 14, 1941.

No. 3124. Some little-known fossil lizards from the Oligocene of Wyoming. By Charles W. Gilmore. Pp. 71–76, figs. 30–32. November 13, 1941.

No. 3125. New species of hydroids, mostly from the Atlantic Ocean, in the United States National Museum. By C. McLean Fraser. Pp. 77–89, pls. 13–18. November 14, 1941.

No. 3126. The Nevada early Ordovician (Pogonip) sponge fauna. By R. S. Bassler. Pp. 91–102, pls. 19–24. November 1, 1941.

No. 3127. The Mexican subspecies of the snake *Coniophanes fissidens*. By Hobart M. Smith. Pp. 103–111, fig. 33. November 13, 1941.

No. 3128. Report on the Smithsonian-Firestone expedition's collection of reptiles and amphibians from Liberia. By Arthur Loveridge. Pp. 113–140, fig. 34. November 14, 1941.

No. 3129. Notes on some crayfishes from Alabama caves, with the description of a new species and a new subspecies. By Rendell Rhoades. Pp. 141–148, figs. 35, 36. November 6, 1941.

No. 3130. Notes on the snake genus *Trimorphodon*. By Hobart M. Smith. Pp. 149–168, figs. 37, 38. November 10, 1941.

FROM VOLUME 92 OF THE PROCEEDINGS

No. 3133. Notes on two genera of American flies of the family Trypetidae. By John R. Malloch. Pp. 1–20, fig. 1. January 7, 1942.

No. 3134. The Freda, N. Dak., meteorite: A nickel-rich ataxite. By E. P. Henderson and Stuart H. Perry. Pp. 21–23, pls. 1–4. March 23, 1942.

No. 3135. Some cestodes from Florida sharks. By Asa C. Chandler. Pp. 25–31, figs. 2, 3. February 9, 1942.

No. 3136. A new species of phyllopod crustacean from the southwestern short-grass prairies. By J. G. Mackin. Pp. 33–39, figs. 4–6. April 15, 1942.

No. 3137. Descriptions of five new species of Chalcidoidea, with notes on a few described species (Hymenoptera). By A. B. Gahan. Pp. 41–51. March 4, 1942.

No. 3138. A new stomatopod crustacean from the west coast of Mexico. By Steve A. Glassell. Pp. 53–56, fig. 7. March 26, 1942.

No. 3139. The chrysomelid beetles *Luperodes bivittatus* (LeConte) and *varicornis* (LeConte) and some allied species. By Doris H. Blake. Pp. 57–74, pls. 5, 6. April 7, 1942.

No. 3140. Notes on the classification of the staphylinid beetles of the groups Lispini and Osoriinae. By Richard E. Blackwelder. Pp. 75–90. April 7, 1942.

No. 3141. Scored bone artifacts of the central Great Plains. By W. R. Wedel and A. T. Hill. Pp. 91–100, pls. 7–13. April 28, 1942.

No. 3142. The identity of some marine annelid worms in the United States National Museum. By Olga Hartman. Pp. 101–140, figs. 8–15. June 10, 1942.

No. 3143. The Sardis (Georgia) meteorite. By E. P. Henderson and C. Wythe Cooke. Pp. 141–150, pls. 14, 15. April 30, 1942.

No. 3144. *Rhopocrinus*, a new fossil inadunate crinoid genus. By Edwin Kirk. Pp. 151–155, pl. 16, April 24, 1942.

No. 3145. Notes on beetles related to *Phyllophaga* Harris, with descriptions of new genera and subgenera. By Lawrence W. Saylor. Pp. 157–165, pl. 17. June 11, 1942.

No. 3146. Descriptions of the larvae of some West Indian melolonthine beetles and a key to the known larvae of the tribe. By Adam G. Böving. Pp. 167–176, pl. 18, 19. June 13, 1942.

REPORT OF

THE UNITED STATES NATIONAL MUSEUM

1943

SMITHSONIAN INSTITUTION
WASHINGTON
D. C.

SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1943

Cx. r. 63.

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1944

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UNITED STATES NATIONAL MUSEUM,
UNDER DIRECTION OF THE SMITHSONIAN INSTITUTION,

Washington, D. C., October 1, 1943.

SIR: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1943.

Very respectfully,

ALEXANDER WETMORE,
Assistant Secretary; Director, U. S. National Museum.

DR. CHARLES G. ABBOT,
Secretary, Smithsonian Institution.

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REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1943

By ALEXANDER WETMORE
Assistant Secretary of the Smithsonian Institution, Director of the United States National Museum

OPERATIONS FOR THE YEAR

APPROPRIATIONS

FUNDS for the operation of the United States National Museum for the year ended June 30, 1943, were made available in the Executive and Independent Offices Act for the fiscal year 1943 approved June 27, 1942. Salaries for the administrative and technical staff, the subprofessional staff, and the clerical, watch, labor, and char forces were covered by the appropriation "Preservation of Collections, Smithsonian Institution," the amount available for these purposes being increased by Public Law 132, approved July 12, 1943. Moneys for the maintenance and operation of the Museum buildings were provided by an allotment under the appropriation "General Expenses, Smithsonian Institution," and printing and binding for the Museum were covered by an allotment from the appropriation "Printing and Binding, Smithsonian Institution." The appropriation and allotments for the work of the Museum, including maintenance and operation of the buildings, are summarized as follows:

Preservation of collections (appropriation)	$646,206	
Public Law No. 132, approved July 12, 1943	53,040	
Available for expenditure		$699,246
Maintenance and operation (allotment)		150,384
Printing and binding (allotment)		43,000
Total available for year		892,630

Changes in the various items are explained as follows:

In the appropriation for Preservation of Collections the funds exceeding those of the preceding year included $10,088 to cover added salary costs resulting from the operation of Public Law 200 (Ramspeck Act). Public Law 132 provided an additional $53,040 for added cost of overtime and increased salaries resulting from the operation of Public Law 694 (the custodial pay bill), which changed the basic salaries of the char force from 50 cents to 65 cents an hour, of unskilled laborers from $1,080 to $1,200 per annum, of guards from $1,200 to $1,500 per annum, of guard sergeants from $1,320 to $1,680 per

annum, and of guard lieutenants from $1,500 to $1,860 per annum, with miscellaneous small increases for members of the mechanical staff. This new schedule of salaries was a most welcome change, since it has operated to decrease the turn-over in personnel that has been one of our continuing troubles for many years.

For Maintenance and Operation there was an increase of $524 to provide for salary increases under Public Law 200.

The miscellaneous expenditures for the Museum dropped sharply during the year from a 3-year average of about $92,000 to $65,000. This decrease was occasioned by the difficulty of obtaining supplies and materials under the existing priorities required by the wartime economy of the Nation.

During the year a ceiling was placed on the number of employees for the Smithsonian Institution, reducing these from 478 to 408. Part of this reduction was absorbed by changing the char hours from 20 to 48 hours a week, and a large part of the remainder was covered by existing vacancies. It was necessary further than this to drop four guard and six laborer positions. Under normal conditions this would have affected the Museum most seriously, but owing to the fact that the present manpower shortage has made it impossible at the moment to fill many positions in which scientific skill is required the actual loss for the time being was not so great as the figures would indicate. The Museum is operating, however, with greatly restricted personnel, and while it may be possible to do this for the period of the war the immediate rebuilding of our staff will be an urgent matter after the war, unless our work is to suffer permanently.

The allotment for printing and binding available was the same as in the preceding year, and under present conditions this is adequate, since the Institution has adopted the policy of restricting its publications almost entirely to studies that relate to the war effort, to knowledge of strategic areas, or to its work in cooperation with the scientists of the other American republics. Following the war, however, when the scientific staff of the Institution resumes its full-scale research program, more printing funds will be required to make the results of their investigations available to the public and to other research workers.

The need for more space for the Museum's collections remains one of our most difficult immediate problems, though it is one that cannot be remedied during the war. While the Institution has discontinued its usual extensive program of field explorations for the duration of hostilities, specimens that must be given adequate protection continue to come to us constantly as gifts. It is becoming apparent also that men in the armed forces will contribute a great deal of material to our collections, especially in the fields of anthropology and biology. In fact, such collections, doubly important since they carry both scientific and sentimental value, are now beginning to come to hand. It is entirely fitting that these things secured by our men who are abroad

should find a permanent home in the National Museum. There is also a certainty that the collections in American history, especially in the departments relating to military and naval affairs, will receive large accretions.

The present disturbed world conditions place upon the Museum the necessity for giving added care to its collections. Destruction and damage to museums abroad are constantly adding to the value of our own great collections. The military occupation of wide areas, with the great disturbance of natural conditions that ensues, also indicates that we must give constant thought to the materials we now possess, since any possibility of their replacement becomes increasingly jeopardized. Our responsibilities in this connection are such that a statement made in the report of the preceding year deserves repetition:

"Under such circumstances our treasures in plant and animal life, living and fossil, in anthropology, in history, in art, and in engineering and the industries demand the most detailed and specific care so that, under the stress of the moment, they may not suffer neglect and damage. They comprise a trust that must be preserved for the culture and life of future generations in our nation."

Plans for additional housing are kept under current consideration in order that they may be ready for presentation in any postwar building program that may be developed.

COLLECTIONS

In spite of the war, additions to the collections continued to come through gifts from interested individuals and by exchanges and at about the usual rate for recent years. The total number received, in fact, has been surprisingly large in view of curtailment in field work on the part of our staff that ordinarily brings large series of specimens. Though less than last year the total is within the usual recent range of variation from year to year.

New material came in 1,177 separate accessions, with a total of 230,231 specimens, distributed among the five departments as follows: Anthropology, 2,514; biology, 213,823; geology, 9,725; engineering and industries, 2,266; and history, 1,903. The last shows an actual increase over the fiscal year 1942.

For examination and report 681 lots of specimens were received, a large part of these being botanical and geological in nature, with many specimens, however, in other groups. A part of these the Museum returned to the senders when examination was concluded, some were consumed or otherwise destroyed during identification and analysis, and some were presented by the senders as additions to our permanent collections.

Gifts of duplicates to schools, museums, and other institutions numbered 2,317 specimens. Exchanges of duplicate materials with other institutions and individuals amounted to 3,689 specimens, and

752 specimens were transferred to other governmental agencies. Loans for scientific study by investigators outside of Washington totaled 19,600 specimens. The summary that follows, of entries now included in the Museum catalogs in all departments, has been adjusted in the case of the division of history to include some materials not previously counted:

Anthropology	711, 117
Biology	13, 752, 348
Geology	2, 683, 608
Engineering and industries	138, 129
History	525, 045
Total	17, 810, 247

EXPLORATIONS AND FIELD WORK

Field explorations for the year were concerned in the main with matters connected with the war effort, or with commitments dating back to the pre-war period. With our usual program curtailed, the scope of the investigations has been changed measurably, though as always valuable results in a variety of directions have been achieved.

In pursuance of the program for the furtherance of cultural relations with scientists in the Latin American Republics in cooperation with the Department of State, three members of the department of biology, Dr. Remington Kellogg, curator of mammals, Ellsworth P. Killip, associate curator of plants, and Dr. Waldo L. Schmitt, curator of marine invertebrates, visited South America for periods of approximately 3 months each.

Dr. Kellogg left Washington on March 2, proceeding to Rio de Janeiro, Brazil, and returned on May 15, 1943. In Brazil he spent most of his time working in collaboration with members of the staff at the Museu Nacional at Rio de Janeiro, with additional contacts made at the Departamento de Zoologia at São Paulo and at the Museu Goeldi at Belém. The work of field stations and laboratories engaged in the study and control of tropical diseases was observed, particular attention being paid to research work involving Brazilian mammals suspected of being, or known to be, the hosts of vectors of transmissible diseases. Through the friendly cooperation of the Fundacão Rockefeller, Dr. Kellogg was enabled to spend a week at its yellow-fever field station near Terezopolis in the Serra dos Orgãos.

Mr. Killip was occupied during March, April, and most of May in Venezuela. Part of the time was given to field work and part to work with Dr. Henri Pittier, Director of the Servicio Botánico, and his associates, in the identification of large plant collections recently made in little-known parts of the republic. Short collecting trips were made to Santa Lucía in the State of Miranda, Rancho Grande in the Parque Nacional, Barquisimeto in the State of Lara, and El Junquito in the mountains near Caracas. At the invitation of O. E. Nelson, in charge of the Venezuelan office of the Rubber Reserve

Corporation, Mr. Killip accompanied a rubber-investigation party to the Río Paragua, a river rising in the Pacaraima Mountains and flowing northward and then eastward to the Río Caroní. Most of the plant collecting, aggregating about 500 numbers, was done between the town of La Paragua and the Cerro Guaiquinima, a region never before explored botanically.

Dr. Schmitt, after some delay due to congested air travel, left Miami, Fla., on April 13 for Brazil, Uruguay, and Argentina, and returned to Washington on June 30, 1943. In these countries he consulted with members of the staffs of various scientific institutions and spent some time examining collections, particularly of fresh-water crustaceans, some of which have considerable economic importance. In Brazil he visited the Museu Nacional in Rio de Janeiro, the University of São Paulo and the Departamento de Zoologia at São Paulo, and the Museu Paranaense in Curityba. In Uruguay his itinerary included the Museo Nacional, the Museo Instituto Geológico del Uruguay, the Museo de Pedagógico, and the Museo de Enseñaza Secundaria de Universidad, all in Montevideo, and also the museum of the Liceo in Paysandú. In Argentina he examined collections and visited the staff of the Museo Argentino de Ciencias Naturales and the University at Buenos Aires, the La Plata Museum at La Plata, the Museo Cornelio Moyano and the Universidad de Cuyo, both at Mendoza, the Universidad de Córdoba at Córdoba, and the Universidad de Tucumán at Tucumán. The director and staff members of the laboratories of the Dirección Regional de Paludismo assisted him on numerous occasions throughout northern Argentina, particularly in Tucumán, Salta, and Jujuy. His field work, accomplished when time and other obligations permitted, included studies in Brazil at Alto da Serra, São Paulo, and at several localities in the vicinity of Curityba, Paraná, in Uruguay at Paso de los Toros, Salto, and Paysandú, and in Argentina at Mendoza, Tucumán, Salta, San Lorenzo, and Quijano.

Philip Hershkovitz, present incumbent of the Walter Rathbone Bacon Traveling Scholarship, which had been granted before the outbreak of war, between June 30, 1942, and April 16, 1943, worked mainly in northeastern Colombia, establishing camps successively at El Salado, at Aguas Blancas, Aguas Verdes, and Palmarito on the Río Guaimaral, at Guacamayo on the Río César, at Villanueva in the Sierra Negra, at Fonseca and Padilla in the Sierra de las Marimondas of the eastern Andes, and lastly near El Orinoco on the Río César, all in the Department of Magdalena, Colombia. More recently Mr. Hershkovitz moved camp to Norosí at the north end of the Cerros de la Honda in the Department of Bolívar.

Under the W. L. Abbott fund of the Smithsonian Institution, M. A. Carriker, Jr., continued work in northeastern Colombia, and Walter A. Weber, assistant curator of birds, accompanied the archeological expedition sponsored jointly by the Smithsonian Institution and the

National Geographic Society to Tabasco, southeastern Mexico. While in Mexico City Mr. Weber availed himself of the opportunity of visiting the Instituto de Biología.

Dr. W. F. Foshag, curator of mineralogy and petrology, continued work in Mexico, where he is in charge of the strategic mineral program for the U. S. Geological Survey. In the course of these investigations he has obtained materials for our collection, some of which have been delivered to the Museum. The bulk, however, remains in Mexico pending shipment to Washington after the emergency.

Late in July, Prof. A. S. Warthin, Jr., of Vassar College, and Dr. G. A. Cooper, associate curator of invertebrate paleontology, left for the Midwest to study Devonian rocks in Illinois and adjacent States. The purpose of the trip was to correlate isolated areas of Devonian exposures in southern, central, and northern Illinois with the better-known sequences in central Missouri and eastern Iowa. About 10 days were spent in Jackson and Union Counties, Ill., making sections and collecting fossils, after which the party moved to Ste. Genevieve County in southeastern Missouri. From this area they went to Calhoun County, Ill., to see the thin stratum of Middle Devonian rocks exposed there. Thence they moved to central Missouri to the vicinity of Fulton and Columbia. The next areas studied were those in northeastern Missouri in Ralls County, the section in eastern Iowa from Muscatine to Davenport, and the adjacent sequence in the vicinity of Rock Island, Ill. Early in September, following the return of Dr. Warthin to the East, Dr. Cooper visited the University of Iowa and from there continued to the University of Wisconsin. While at Madison he made a short trip to Port Washington and Milwaukee to examine Devonian outcrops in these neighborhoods, thence returning to Urbana, Ill., to study fossils and confer with the Illinois State geologists. He was ordered then to southeastern Missouri not far from Cape Girardeau to report on a deposit from which several bones of a dinosaur had been taken.

Later in the year under the cooperative work between the Department of State and the Smithsonian Institution, and as the result of a special request by Ing. Luis Flores C., of the Instituto Geológico de México in Mexico City, Dr. Cooper was detailed to confer with Mexican geologists and then to investigate Paleozoic sequences in the neighborhood of Caborca in northwestern Sonora. He arrived in Mexico City on March 28 and for 3 weeks was occupied with preparations for the trip north. On April 17 Dr. Cooper and Ing. Arellano left Mexico City for Caborca, arriving 3 days later. The next 5 weeks were devoted to stratigraphic studies in the small hills lying chiefly to the west of Caborca and extending as far as El Antimonio. During these investigations they discovered several long sequences of Cambrian rocks and good sections of Mississippian and Permian strata. On May 28 they left Caborca and returned to Mexico City, where 3

weeks were devoted to conferences with Mexican geologists. Five days were given to a visit to the new volcano, Parícutin.

Only brief mention was made in last year's report of the field expedition of the Smithsonian to Wyoming under the direction of Curator C. W. Gilmore, since it extended well into the present fiscal year. Accompanied by George F. Sternberg, George B. Pearce, and Alfonso Segura, the latter of the Museo Nacional, San José, Costa Rica, the party spent nearly 2½ months in the systematic search of the Hat Creek Basin area, Niobrara County, Wyo., for Oligocene vertebrate fossils. This work resulted in assembling a collection of 236 lots of specimens having a weight of 6,050 pounds, among which were several specimens of outstanding merit. Combined with the collection made here in 1932, this gives the Museum for the first time an adequate representation of this important fauna.

Dr. Waldo R. Wedel, associate curator, division of archeology, was detailed to the Bureau of American Ethnology from January 16 to June 1, 1943, in order to assist M. W. Stirling, Chief of the Bureau, in archeological excavations near La Venta, in the State of Tabasco, Mexico. These excavations, constituting an important program of research among the Pan American republics, were sponsored jointly by the Smithsonian Institution and the National Geographic Society.

THE MUSEUM IN WARTIME

In the 12 months covered in the present account the continuance of our public exhibitions and the change in hours to allow our public halls to be open all day Sunday have been abundantly justified. Although naturally there has been a decrease in the total number of visitors below that normal for times of peace, the 1,355,269 persons recorded at our doors during the year indicate the great interest that exists in our public displays. The number is decidedly more than the total population of the Greater Washington area, indicating that, at the present time when gasoline rationing and crowded travel lines prevent ordinary journeys, the National Museum has been a favored spot by those who now are in Washington. Among our visitors an average of more than 1,000 each day are men and women in uniform, the number being especially large on Saturday and Sunday when many are in the city on week-end furloughs.

Last year's report indicated steps taken for adequate safeguard for our collections and operations during the period that the Nation will be at war. These precautions have gone forward. The work of safeguarding employees, visitors, and the buildings and their contents was started under the supervision of Carl W. Mitman, head curator of engineering and industries, soon after the United States entered the war. On August 17, 1942, the Secretary of the Smithsonian Institution appointed Frank M. Setzler as general defense coordinator of all Smithsonian buildings on the Mall,

excluding the National Gallery of Art. Since the declaration of war, service units have been organized, a program of training has been initiated among the various groups of employees, air-raid alarm systems have been installed, fire-fighting, air-raid, and first-aid equipment procured, air-raid shelters designated, and complete blackout facilities where necessary established. During the year, in cooperation with the District of Columbia, 5 practice air-raid drills were held during the daytime, and 10 practice blackout drills were held at night. A few practice drills were held independently of the city-wide drills. Twice during the year our air-raid defense organization, consisting of approximately 212 employees, was given instructions in the use of the fire hoses, chemical fire extinguishers, and the portable fire pumps. Numerous incidents were prescribed during the daytime air-raid drills which provided practice for the stretcher and first-aid squads. All appropriate protective measures as outlined in the official "Air Raid Protection Code" under stages A and B have been fulfilled. All these arrangements have naturally imposed an extra amount of labor on the staff; without their willing cooperation much of this work could not have been accomplished.

Mention was made in the last report of the removal of certain collections for storage outside our buildings. Some additional materials have been added to these.

Throughout the year members of the staff have been occupied with considerable work connected with the war effort, either through direct contact with various war agencies or through the Ethnogeographic Board. This has included "spot" information in various fields, research, and experiment. The variety of these matters is indicated by the following enumeration of some of the items on which data were requested: Camouflage plants; natural vegetation of specific regions; illustrations of poisonous plants and of emergency food plants and data regarding them; destruction of mosquito-harboring epiphytes; distribution of certain plants of known economic importance; botanical exploration; the use of land, fresh-water, and marine animals for food, the palatability of the flesh thereof, and methods of capture; the serviceability of hides and skins for various purposes; disease transmission; noxious, poisonous, or otherwise dangerous animals; intermediate hosts of animal and human parasites; aid in the preparation of survival manuals and other military and naval handbooks; distributional lists of insects and other animals of medical importance; outlines for insect surveys in foreign areas; instruction in mosquito identification; collection and preservation of specimens, especially those of medical importance; supplying duplicate sets of insect material not otherwise readily obtainable for the use of Army and Naval medical schools; biological and oceanographic problems; marine fouling organisms; bibliographic surveys; recommendations regarding personnel.

Assistance has been given in the identification of tribal culture

patterns chiefly of the island peoples of the west Pacific area and of continental southeastern Asia. Other information provided, in this instance obtained from our photographic files, related to the need of our aviators and soldiers to recognize religious caste markings and, to assist in the orientation of aviators, the types of house construction in various parts of southern Asia. A mass of information directly based on our collections was given to such agencies as the Board of Economic Warfare and the War Production Board, bearing directly on the development of the use of substitute materials for civilian use.

Various articles describing the more remote peoples and their cultures were prepared and published.

Though it cannot be told here or now, the story of the Museum's participation in this war is one in which we can all take pride.

VISITORS

Visitors to the Museum buildings during the year totaled 1,355,269, somewhat less than the number recorded for the previous year, 2,042,817. This decrease can, of course, be attributed to the rationing of gasoline, including the curtailment of pleasure driving and vacation travel, the elimination of sightseeing busses, all resulting from the war, and the application of the American public to its wartime activities. The largest monthly attendance was during August 1942, with 163,413 visitors, and the second largest was during July 1942, with 136,111. In table 1 will be found the number of visitors during each month of the year.

From November 1, 1942, to June 30, 1943, a separate count was made of members of the armed forces who visited the buildings during the first 7 days of each month. This count served to show that attendance by service people averaged 25 to 35 percent of the total number of visitors.

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1943*

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building	
1942					
July	25, 782	54, 960	39, 841	15, 528	136, 111
August	30, 797	64, 137	49, 594	18, 885	163, 413
September	25, 230	49, 981	42, 184	12, 987	130, 382
October	21, 766	43, 001	38, 622	11, 031	114, 420
November	21, 118	41, 014	33, 809	11, 663	107, 604
December	12, 499	24, 875	22, 432	7, 076	66, 882
1943					
January	16, 229	33, 652	29, 911	9, 010	88, 802
February	18, 232	31, 439	29, 406	9, 660	88, 737
March	21, 696	41, 391	31, 087	12, 519	106, 693
April	26, 399	51, 102	38, 062	15, 348	130, 911
May	24, 576	45, 164	36, 393	14, 000	120, 133
June	19, 793	36, 194	32, 714	12, 480	101, 181
Total	264, 117	516, 910	[1] 424, 055	150, 187	1, 355, 269

[1] Not including 2,860 persons attending meetings after 4:30 p. m.

LIBRARY

In much the same way that industrial byproducts are often found to have unexpected values and uses, the books and periodicals accumulated through the years to serve the curators of the Museum in their care and study of the collections in their custody have been discovered to contain information useful and sometimes of unique importance to the war agencies. During the present fiscal year the Museum library has probably been used for more different kinds of research, and has answered questions on a greater variety of subjects, than at any other period in its history, but in almost every case with an identical ultimate objective—the winning of the war.

The exact nature of the reference questions asked and answered, the subjects of the bibliographical lists made for special purposes, and the reasons why certain books were borrowed cannot, for obvious reasons, be given, but the list would be an interesting and a surprising one. Representatives of about 35 different branches of the war agencies have called for assistance or have come in person to do research, and two-thirds of the 687 loans of books to outside libraries were made to war-agency libraries. Most of the use of the library by the members of the curatorial staff of the Museum, too, was connected in some way with the war, either for war projects in which they themselves were engaged, or in which, as special consultants, they were giving help to others. Outside the processes involved in the acquisition, cataloging, and other preparation of books and periodicals for use, which cannot be neglected without serious crippling of library service, a very large part of the time of the library staff may be said to have been devoted to giving aid in the war effort.

One painstaking and useful piece of bibliographical work fortunately can be given special mention. In connection with the proposed union list of Russian serial publications to be compiled by the Special Libraries Association, Mrs. Elisabeth H. Gazin, associate librarian, prepared a list of the 157 titles of Russian periodical sets in the library, giving the exact holdings of the library in each set.

There were a number of especially notable accessions during the year. One of the largest and most important gifts was a collection of 350 books, many of them rare and beautiful volumes, on arms and armor, presented by Ralph G. Packard, of Morristown, N. J., to accompany the collection of arms and armor that he gave to the Museum.

Another special collection of great usefulness was the late Dr. Frank Smith's bequest of his working library of oligochaete literature, 1,103 pieces in all. This has been assigned to the sectional library in the division of marine invertebrates, where it is particularly valuable because it so well supplements the slide and specimen collection that Dr. Smith gave to the Museum during his lifetime.

The library was also so fortunate as to be able to secure about 250 volumes and 2,300 pamphlets, mostly on the subject of reptiles, from the library of the late Dr. Leonhard Stejneger, formerly head curator of the department of biology.

From the library of the late George P. Engelhardt came 45 volumes and 7 pamphlets as a gift to the sectional library in the division of insects.

A unique gift presented by Dr. Stuart H. Perry was a five-volume set of photomicrographs of meteoric irons, to accompany the photographic plates in the division of minerals. Deposited in the Museum library was the invaluable gift from the Linnean Society of London to the Smithsonian Institution of the microfilm records of the Linnean collections and manuscripts. All the actual specimens in the Linnean herbarium are covered in the 60,000 exposures of this set, as well as records of the mollusks, fishes, and insects, of various manuscripts, and of those of Linnaeus's own publications to which he had added corrections or emendations.

An important transfer of material from the Fish and Wildlife Service of the Department of the Interior was the collection of manuscript records of the dredging and hydrographic stations of the scientifically famous ship *Albatross* and other Bureau of Fisheries vessels.

Accessions of books and periodicals by purchase and by regular and special exchange were much as in the preceding year, with a fairly well stabilized flow of material continuing to come from allied and neutral countries abroad. As always, there were many generous gifts of books and pamphlets from members of the staff of the Institution and from other friends.

Current work was everywhere well kept up in spite of heavier duties, the loss of one position, and some unavoidable time-lag in filling other vacancies. The fine spirit of the staff in taking on extra work and in meeting emergencies deserves comment.

Much thought and a great deal of hard work went into the problem of relieving the serious overcrowding of the shelves in the Natural History Building. The extensive shifting and rearrangement necessary to make the best use of the 12 new sections of shelving added last year was continued and finished on the first floor. About 1,500 volumes were selected for transfer to the stacks in the Arts and Industries Building, where further extensive shifting was necessary to make room for them and where their orderly arrangement and their recording in the catalog was completed. It was particularly gratifying to be able to prepare and send to the bindery this year 1,650 volumes, mostly periodicals.

Changes on the staff were as follows: Miss Minna Gill was appointed assistant librarian on September 2, 1942. On December 9, 1942, Miss Elizabeth G. Moseley was promoted from the position of under library assistant to that of junior librarian. Mrs. Daisy F.

Bishop was appointed under library assistant on February 17, 1943. Miss Marjorie R. Kunze was promoted on February 24, 1943, from the position of under library assistant to that of library assistant.

Statistics

Accessions (volumes and pamphlets) cataloged	2,678
Volumes added by binding periodicals	1,002
Periodicals entered	6,114
Cards added to catalogs and shelf-lists	13,737
New exchanges arranged	101
Circulation of books and periodicals	10,154

Exclusive of incomplete volumes of periodicals, and of uncataloged material, the Museum Library now numbers 226,967 volumes and pamphlets.

PUBLICATIONS AND PRINTING

A total of $43,000 was allotted for National Museum publication requirements for the fiscal year 1942–43, the same amount as for the previous year. An apportionment of $27,750 of this allotment was made for the printing of Museum Bulletins, Proceedings, and the Annual Report. Of the balance, $12,000 was allotted for binding and $3,250 for the salary of the Museum printer. Publications issued numbered 30—the Annual Report, 3 Bulletins, 1 Contribution from the National Herbarium, and 25 Proceedings. A list of these publications is given on page 111. Volumes bound totaled 1,865.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 49,818 copies, while in addition 5,813 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

Paul H. Oehser, the Museum editor, continued during the year as editor of the Proceedings of the Eighth American Scientific Congress, working in collaboration with the Division of International Conferences of the Department of State. At the close of the year nine volumes of these Proceedings had been published, the remaining three volumes of the series being in the process of binding, so that it was possible to bring the actual editorial work to a close by June 30. The editor served also as chairman of the Efficiency Rating Committee of the Smithsonian Institution and devoted considerable time to the administration of efficiency ratings as required by Civil Service regulations.

Indexing.—Work on the comprehensive index to Museum publications, consisting this year of indexing the Annual Reports from 1882 to 1886, was carried on by Miss Gladys O. Visel, editorial clerk, and Mrs. Marguerite W. Poole, information clerk. Indexes to volumes 91 and 92 of the Proceedings were also prepared for printing.

Museum print shop.— As in former years, F. W. Bright was detailed from the United States Government Printing Office to print museum

and herbarium labels and special forms at the Museum print shop, a branch of the Government Printing Office. Of the 125 requisitions that were submitted for printing, Mr. Bright completed 109; in addition 3 that were submitted during the previous fiscal year were finished, a total for the year of 112. Five of the uncompleted requisitions represent specimen labels or large exhibition labels, involving long press runs or much hand setting of type. The remainder were submitted too late in the year for completing before June 30. With the exception of these, the work of the print shop is nearly up to date.

PHOTOGRAPHIC LABORATORY

The Bureau of American Ethnology, the National Collection of Fine Arts, and the National Museum have continued their cooperative arrangement with the photographic laboratory. Under this plan the laboratory has made 3,766 negatives (including 138 photomicrographs), 13,986 prints, 168 lantern slides (including 41 kodachrome slides), 518 enlargements, and 98 transparencies (including 8 kodachromes). It has also developed 14 rolls of film, 26 film packs, and 77 cut films and has mounted 74 prints. These figures show a substantial increase over the work accomplished last year. About one-third of this year's work in the laboratory, especially that of making negatives and prints, was in connection with illustrations for the Smithsonian War Background Series of publications and in furtherance of the work of the Ethnogeographic Board and the Smithsonian War Committee.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—Besides the routine repairs necessary to the upkeep of the various Museum buildings, one important installation was made during the year. A fumatorium for the fumigation of Museum specimens was installed in the shipping room of the Natural History Building and placed under the supervision of the property officer.

In the absence of an appropriation to resurface in toto the private road that serves the Natural History Building, it was decided to repair the worst-worn sections and to postpone the widening and replacement of this road. On June 30, this repair work was about three-quarters completed.

Scrap-metal salvage.—Special efforts were made during the year to collect metal as a contribution to the war. All supervisors were instructed to make special surveys and to gather all available waste metal. This drive resulted in turning over to the Procurement Division 50,461 pounds of scrap metal between August 13, 1942, and May 21, 1943, in addition to 300 pounds of salvaged tin cans collected in boxes placed at the private entrances to the several Museum buildings, and in the north lobby of the Natural History Building, for the convenience of Museum employees.

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Heat, light, and power.—Electric current used during the year amounted to 1,359,000 kilowatt-hours.

The amount of steam used during the year, furnished entirely by the Central Heating Plant of the Government, was 54,856,000 pounds, 272,000 pounds more than for the previous year.

Ice production.—Ice manufactured by the refrigerating machine for the Museum buildings amounted to 215 tons, at a cost of $1.42 a ton. The reduction in the amount of ice produced this year from the 276 tons for last year was due to the elimination of most of the bottle-type water coolers from the third floor of the Natural History Building. No ice was purchased.

Fire protection.—Four additional soda and acid fire extinguishers were installed in the Natural History Building during the year, and periodic tests and inspections were made of those already installed. Some of these inspections included demonstrations in the handling of this equipment for the benefit of the Museum air-raid wardens and newly appointed guards. Several tetrachloride extinguishers of the one-quart hand type were installed in the several buildings.

Air-raid alarms were tested once each week during the year.

Furniture and fixtures.—Furniture added during the year consisted of 4 exhibition cases and bases and 85 pieces of storage, laboratory, office, and other furniture. Condemned and disposed of were 42 exhibition cases and bases and 16 items of storage cases, laboratory, office, and other furniture. An inventory as of June 30, 1943, showed on hand: 3,545 exhibition cases; 20,201 pieces of storage, office, laboratory, and other furniture; 114,206 drawers, boxes, and wing frames.

MEETINGS AND SPECIAL EXHIBITS

As in former years, the auditorium and lecture room of the Natural History Building were made available for meetings of educational, scientific, welfare, and governmental organizations and groups, with assistance from the Museum when cooperation was possible; 128 such meetings were held during the year. Because of wartime conditions the regularly scheduled Arthur Lecture of the Smithsonian Institution was suspended.

The foyer and adjacent space of the Natural History Building, allotted to special exhibits, were in almost continuous use. Twelve such exhibits were held, as follows:

July 1 to 27, 1942: Exhibition of paintings by Señorita Carmen Madrigal Nieto, of Costa Rica.

July 1 to September 15; October 1 to 31, 1942: Exhibit arranged by the National Museum showing evolution of firearms.

September 15 to October 1, 1942: Exhibition of paintings by Señorita Pachita Crespi, of Costa Rica.

November 5 to 29, 1942: Exhibition of paintings by Frank C. Kirk, of New York.

December 1, 1942, to January 4, 1943: Exhibit of war materials, sponsored by the National Museum.

January 8 to 31, 1943: Exhibition of paintings and designs on Lenox vases and platters by Simon Lissim, of New York.

February 5 to 28, 1943: Exhibition of water colors by Leonora Quarterman, of Savannah, Ga.

March 1 to 31, 1943. Exhibition of photographs, by the Potomac Appalachian Trail Club.

April 1 to 30, 1943: Exhibition of photographs—"Our Navy in Action"—sponsored by the Navy Department.

May 1 to 31, 1943: Exhibition of photographs, sponsored by the Arlington Camera Club.

June 1 to 30, 1943: Exhibition of landscapes in oil, by Walter King Stone, of Ithaca, N. Y.

June 1 to 30, 1943: Exhibit of shells and marine specimens from New Caledonia and the Loyalty Islands, arranged by the National Museum.

CHANGES IN ORGANIZATION AND STAFF

In accordance with the terms of Public Law 821 and Executive Order 9289, the service for the regular personnel of the National Museum was increased to 48 hours a week by addition of one hour a day and the elimination of the Saturday half-holiday. It was required that this increased individual service be accompanied by a reduction in force to free manpower for other use, in which all necessary separations were taken care of by transfer to other agencies. This reduction brought about a reorganization of the char force by increasing the period of duty from 20 hours to 48 hours a week. Unclassified employees were given classified status under the Ramspeck Act and and Executive Order 8743.

To afford a more usual description of the functions of his position, on January 16, 1943, Dr. Alexander Wetmore's title was changed to assistant secretary, Smithsonian Institution, director, United States National Museum.

In the department of anthropology, Dr. Joseph E. Weckler, Jr., associate curator in the division of ethnology, resigned on January 6, 1943.

Following the death of Dr. Leonhard Stejneger, head of the department of biology for many years, Dr. Waldo L. Schmitt, curator in the division of marine invertebrates, was advanced to the position of head curator of the department on June 16, 1943. Dr. Doris M. Cochran's title was changed on March 27, 1943, to associate curator in charge of the division of reptiles and amphibians. In the division of mollusks, Dr. Harald A. Rehder was reallocated to associate curator and Dr. Joseph P. E. Morrison to assistant curator on September 1, 1942. On July 1, 1943, Walter A. Weber was appointed assistant curator on the staff of the division of birds to succeed S. Dillon Ripley, 2d.

During the absence of Frank A. Taylor, who is now on military duty, the head curator of the department of engineering and industries, Carl W. Mitman, assumed charge of the division. In the division of

engineering, Fred C. Reed was appointed acting associate curator on August 1, 1942, while Paul E. Garber is on military furlough. Other division of engineering staff appointments, to be effective only for the duration of the war, are: Kenneth M. Perry, advanced from exhibits worker to senior scientific aide, August 1, 1942; Burlie Parks, transferred from the Museum property office to the position of exhibits worker formerly held by Mr. Perry. Dr. Wallace E. Duncan, assistant curator, section of chemical industries, resigned on July 31, 1942. The vacancy caused by his resignation was filled November 2, 1942, by the transfer of Joseph W. Schutz from the Social Security Board.

An honorary appointment was conferred on Dr. Walter K. Fisher as associate in zoology on June 25, 1943. The honorary title of Dr. T. Wayland Vaughan was changed on July 28, 1942, from associate in marine sediments, department of biology, to associate in paleontology in the department of geology, to represent his existing activities more accurately.

Employees furloughed for military duty during the year were as follows: Everett A. Altizer, on July 6, 1942; Paul E. Garber, on July 6, 1942; Samuel T. Fetterman, on July 20, 1942; Dr. Charles L. Gazin, on July 20, 1942; Preston L. Travers, on July 22, 1942; John L. Theunissen, on August 24, 1942; Ernest Desantis, on September 30, 1942; John B. J. Peck, on September 30, 1942; Glen P. Shephard, on October 15, 1942; Dr. Marshall T. Newman, on December 3, 1942; Harold W. McGiverin, on December 11, 1942; and Frank A. Taylor, on April 14, 1943. Furloughed for duty in private industry were: Edward Zuranski, on January 23, 1943, and Charles F. Huselstein, on May 28, 1943.

Through the operation of the retirement act, Joseph A. Boswell, principal guard (sergeant), retired on June 30, 1943, at his own option, with 17 years of service.

The year was marked by the death of several staff members long connected with the Museum. The death of Dr. Leonhard Stejneger on February 28, 1943, deprived the Museum of one of its most internationally known scientists. Harry S. Jones, principal mechanic, foreman of electricians, died suddenly on September 11, 1942; John D. Ray, junior laborer, died on October 28, 1942; and Jennie T. Jackson, charwoman, on August 29, 1942. In addition to these the honorary staff lost Dr. Samuel W. Woodhouse, collaborator, section of ceramics, department of anthropology, by death on February 2, 1943, and Dr. Mary J. Rathbun, associate in zoology, department of biology, whose death occurred on April 4, 1943.

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Head Curator*)

GLOBAL warfare, especially in the more remote areas of the earth, has focused attention on our knowledge of the aboriginal peoples and their culture. Numerous specimens, resulting from anthropological investigations of primitive cultures, as well as those collected by early explorers, have provided many pertinent details of value to our armed forces. Investigators from the various military organizations have searched our collections, analyzed specimens, and described and illustrated the diagnostic features of native inhabitants, such as houses, weapons, food plants and animals, wearing apparel, and religious objects. The well-preserved condition of these specimens, some of which were collected over 75 years ago, as well as the classification of the data, reflects the care and method of preservation employed by preceding and present staff members. This is especially significant in the division of ethnology, where 80 percent of the collections are of a perishable nature.

The department has given priority to all requests from war agencies, the Smithsonian War Committee, and the Ethnogeographic Board. Several temporary exhibitions dealing with war topics were installed in the foyer of the Natural History Building under the supervision of the staff. Owing to the rearrangement of our study collections, necessitated by defense precautions, considerable time has been devoted to the inspection of the collections and supplying the requisite amount of poisoning for the preservation of perishable objects.

Soon after January 1943 the department gave up 25 percent of its employees, some for the duration of the war and others for a period of 6 months. This reduction in manpower has been partly overcome by an increase in the hours of work and by additional responsibilities assumed by the remaining staff.

Dr. Waldo R. Wedel, associate curator of archeology, was detailed to the Bureau of American Ethnology for approximately 6 months in order to assist M. W. Stirling, Chief of the Bureau of American Ethnology, in the Smithsonian Institution-National Geographic Society archeological excavations near La Venta, in the State of Tabasco, Mexico. Dr. T. Dale Stewart, curator of physical anthropology, supervised the leveling of a supposed Indian mound near West Point, Va.

Dr. Samuel W. Woodhouse, Jr., collaborator in the section of ceramics, died in Philadelphia, Pa., on February 2, 1943. Dr. Wood-

house was given honorary appointment as collaborator in ceramics on January 11, 1928, and for some time prior to that date had been associated with the Institution in connection with the art collection presented by the late Alfred Duane Pell to the former National Gallery of Art, now the National Collection of Fine Arts.

ACCESSIONS

Accessions received by the department during the year totaled 78 (2,514 specimens, a reduction of 486 as compared to the previous year). The classification and cataloging of several large collections accessioned in former years were completed. The 78 new accessions were assigned within the department as follows: 1 loan assigned to the head curator's office consisted of specimens from the British Information Services for a temporary exhibition pertaining to "Britain's Offensive"; archeology, 16 (1,546 specimens); ethnology, 33 (420 specimens); ceramics, 11 (185 specimens); musical instruments, 2 (3 specimens); period art and textiles, 6 (48 specimens); physical anthropology, 9 (312 specimens).

Archeology.—The following are among the more important of the new acquisitions: 1,359 specimens, chiefly earthenware vessels, potsherds, and figurine fragments, from Tres Zapotes, on the Arroyo Hueyapa, Tuxtla District, southern Veracruz, Mexico, collected during the winters of 1938–39 and 1939–40 by the Smithsonian Institution-National Geographic Society expeditions under the leadership of M. W. Stirling, received as a transfer from the Bureau of American Ethnology; 51 stone, bone, shell, and earthenware objects from the Irene Mound site, 5 miles above Savannah, Chatham County, Ga., collected under the sponsorship of the Chatham County Commissioners and the Savannah Chamber of Commerce, transferred by the Work Projects Administration; 24 earthenware vessels, clay heads, projectile points, etc., gathered adjacent to the ruins of Calixtlahuaca (Temple of the Wind), near the city of Toluca, State of Mexico, Mexico, and donated by Charles Burton; 2 wooden figurines, one unfinished, from Belle Glade, Palm Beach County, Fla., exhumed and presented by H. H. Hart; 1 obsidian mirror, found in a stream bed at Olmedo, about 20 kilometers south of Santa Ana, Manabí Province, Ecuador, received as a gift from O. L. Haught; 33 reconstructed earthenware vessels and representative potsherds from Ocmulgee National Monument, Bibb County, Ga., transferred by the National Park Service as the Smithsonian Institution's share of the materials recovered under various relief projects since December 1933.

Ethnology.—The most unique and interesting specimen received in the division of ethnology is a ceremonial mace of serpentine from the Island of Maré, east of New Caledonia in the Loyalty group of islands,

which was presented by Maj. Gen. A. M. Patch, U. S. Army. The mace was originally given to the donor by Henri Naisseline, grand chief of Maré, in whose family the specimen had long been treasured as an heirloom. Although the mace is new to our ethnological collections, it has been possible to obtain excellent information regarding this type of ceremonial weapon from French scientific literature on New Caledonia and the Loyalty Islands. This ceremonial mace ranks as the outstanding accession of the year and has been placed on special exhibition.

An important collection, consisting of 259 specimens from the Aleut, Alaskan Eskimo, Tlingit, and Haida of southeast Alaska, and the Salish of British Columbia, was donated by Mrs. Joseph Stanley-Brown. This material had been collected by the donor's husband when he was stationed at Dutch Harbor from 1890 to 1898 while in charge of the Pribilof Island seal fisheries. Thirty-four weapons and pieces of armor from the Mindanao Moro, collected in 1900, were received as a gift from Col. James A. Wheeler, U. S. Army (Rtd.). A small collection of inscriptions on bamboo from the southern Mangyan, and a similar inscription from the Buhil-Mangyan, Mindoro, P. I., together with four musical instruments from the same peoples, were presented by Maj. Fletcher Gardner, U. S. Army (Rtd.). Fishing paraphernalia, tools, utensils, and other objects used in the daily life of the Payamino Indians, eastern Ecuador, originally collected by C. Spencer, also five ceremonial dance masks fashioned by the Kobeua (Cubeo) Indians, of the Department of Vaupés, southeast Colombia, were received by transfer from the Bureau of American Ethnology. A small number of specimens from the Canelos Indians, who live along the Río Bobonaza, Oriente Province, Ecuador, among which is a feathered dance headdress outstanding for its artistry of design and beauty of color, were donated by Ford Fishback. Two hand-woven costumes from a male and a female Chamula Indian, a tribe found in the vicinity of San Cristóbal, Chiapas, Mexico, were presented by Richard Ceough. The collection of historic religions was enlarged through the gift by Mrs. Wilbur J. Carr of a Biblical widow's-mite, a bronze coin of the Roman, Alexander Jannaeus (105–78 B. C.).

Among the collections assigned to the section of ceramics the following are worthy of note: A Staffordshire, England, stoneware plate with paneled painting of the burning of the New York Stock Exchange in 1835 was presented by Stephen B. McDaniel. Two porcelain vases and plates from Capo di Monte molds, made at the Florence, Italy, factory of Marquis Ginori about 1821, were added to the collection of early Italian wares by the late William Evelyn Jones. Included in a gift by Mrs. Raymond T. Holden were four

interesting examples of ancient Greek painted terra cotta consisting of pitchers and lamp fillers excavated at Pompeii and made presumably by Greek colonists at Apulia, southern Italy, during the fourth century, B. C. A large collection of American glass made during the late 1880's and including excellent examples of "Burmese" blown glass made by the Mount Washington Glass Co., New Bedford, Mass., and "Peachblow" glass from the Boston & Sandwich Factory, Sandwich, Mass., "case" glass, a product of a Wheeling, W. Va., factory, and specimens illustrating the type of colored glass produced by the New England Glass Co., Cambridge, Mass., mostly of a greenish yellow, shading into a delicate rose color, was received as a gift from the estate of Mrs. Emma Caroline Schenck Cecil.

Among the various accessions assigned to the section of period art and textiles, the most noteworthy was a collection of antique jewelry from Scotland, Hungary, Portugal, France, Egypt, China, Ceylon, and the Philippine Islands, consisting of gold necklaces, bracelets, and brooches jeweled with star sapphires, opals, emeralds, and diamonds, collected and presented by Miss Mary E. Maxwell. A chased and embossed ornamental snuffbox, with amethyst surrounded with brilliants inset in a lozenge of blue enamel, and bearing the registry mark of Bergen, Norway, was donated by Mrs. Leonhard Stejneger at the expressed wish of her husband, the late Dr. Leonhard Stejneger, for many years head curator of the department of biology. Also noteworthy of mention is a collection of 12 eighteenth and nineteenth century Spanish, French, and Chinese antique, hand-painted ornamental fans with filigreed and inlaid staves of ivory and mother-of-pearl, received as a gift from S. L. Israel.

A French bagpipe assigned to the section of musical instruments was included in the gift of numerous objects of Swedish and other European national folk art by Mrs. W. Duncan McKim.

Physical anthropology.—Included in the accessions of this division are Indian skeletal remains from two ossuaries on the farm of Mrs. Alice L. L. Ferguson, near Accokeek, Prince Georges County, Md. Previously we had received the remains from ossuaries Nos. 1 and 3, and now by the receipt of those from Nos. 2 and 4 the gift is completed. Altogether this collection represents one of the largest samples of the aboriginal population from along the Atlantic coast. Another interesting item is a midget's skull from Peru, donated by J. Robert Wells. The capacity of this skull is only 485 cc., which seems to be the smallest human adult skull thus far reported.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Several temporary exhibitions were installed, under the direction of the head curator, in the foyer of the Natural History Building. Through the cooperation of Capt. Charles Carey, assistant curator of history, and Herbert W. Krieger, curator of ethnology, an interest-

ing exhibition was prepared illustrating the "Evolution of Firearms," which traced the development of weapons from the earliest type of sling through the throwing stick, Chinese whistling arrows similar to those used by Genghis Khan, Chinese and European crossbows, prototypes of pistols, rifles, and machine guns, culminating in the Garand rifle, modern machine gun, and models of tanks now used by the United Nations and Axis forces. This display remained on exhibition throughout September, October, and November 1942. During December 1942, in cooperation with the British Information Services, a special exhibition portrayed "Britain's Offensive." A ceremonial mace presented to General A. M. Patch, U. S. Army, by Henri Naisseline, grand chief of Maré, in the Loyalty Islands group east of New Caledonia, was placed on special exhibition. The mace was donated to the national collections by General Patch at the time of his visit to the National Museum.

With the operation of the new fumatorium the task of thoroughly poisoning perishable specimens has been lessened and the operation standardized. As time and personnel permit, all our specimens liable to infestation will be subjected to this procedure. The transfer of numerous objects now in open racks into standard storage cases will simplify the assignment, classification, and the keeping of our specimens in good condition.

Archeology.—During the year 14 new and revised archeological exhibits were installed, covering the following subjects: Peruvian pottery and textiles; miscellaneous materials from South American republics; ornaments, amulets, and religious objects, alabaster vases, earthenware wine vessels, and plaster casts of statuettes, all from ancient Egypt; and Roman, Greek, and Syrian lamps. Four additional cases were arranged for special display in the foyer.

More than 2 months were devoted to the cleaning and repair of prehistoric Peruvian pottery in anticipation of the exhibits mentioned above. Three American cases were lined with monk's cloth; loose glass was tightened on 50 other cases; 100 quarter units of new storage cases replaced the old racks in the east corridor of the north wing on the third floor. The division's correspondence files were rearranged and put in order, and the card catalog was condensed to save space.

The new fumatorium was used to poison all the Aleutian mummy bundles and other prehistoric perishable materials.

The cleaning, sorting, and listing of the 1939 and 1940 collections brought back by the Smithsonian Institution-National Geographic Society expeditions to Tres Zapotes, Véracruz, Mexico, occupied members of the staff from August 1942 until early in March 1943. Catalog cards have been typed, but at least 6 months more will be required for marking the individual specimens. All minor accessions have been cataloged.

Ethnology.—The division of ethnology cooperated with the division of history in the installation of specimens illustrating the evolution of firearms. Ethnology displayed primitive weapons such as were in general use up to the introduction of firearms and gunpowder, while history exhibited specimens illustrating the advance of projectile weapons from that period up to the present. Display cases depleted or emptied through evacuation of specimens have been provided with new or auxiliary exhibits for the duration of the war. The ceramic gallery in the Arts and Industries Building has been redecorated. All shelving and backs of cases were covered with monk's cloth after minor changes were made in cabinet work in certain deep wall cases, making for neatness of display and increased visibility. All material exhibited has been cleaned and each exhibit rearranged.

The wooden bases supporting the bronze statuary of the Herbert Ward collection from the Congo have been repaired. Ceiling and walls of the hall housing this invaluable collection have been repainted. Painting of the ceiling and walls of hall 7, Natural History Building, has enlivened the exhibits of African, Melanesian, Micronesian, Polynesian, and Indonesian ethnology. Repairs of 10 of the keyboard instruments of the Hugo Worch collection included the redraping of front panels with wine-colored rayon. A new exhibit illustrating the artistic and ornamental use of silver in the handicrafts of various South American peoples was installed in the hall devoted to South American ethnology. This display shows a pleasing combination of colonial Spanish and native Indian techniques in metal working.

All current accessions and those from previous years have been classified and cataloged. The tribal index for the many thousands of specimens of the Victor J. Evans accession, a major collection of the division, has been completed by Mrs. Jessie S. Shaw, clerk-stenographer. She has also undertaken an inventory and the recataloging of laces now included in the study series of the section of period art and textiles. The entire collection is being reclassified according to type, with cross references to donors and collectors. It is thought when this work is completed that most of the more important laces from the study series can be assembled in glass-covered trays in the hall of period art and textiles for reference use by Museum visitors. This arrangement should supplement the limited number of display cases now on exhibition. The work performed by the laboratory of the department in the restoration and repair of specimens, particularly in the field of southwestern Pueblo pottery, has made many additional specimens available for study purposes.

Physical anthropology.—The exhibition illustrating artificial cranial deformity was reorganized so as to show in one large flat-top case

examples from North America and in another those from South America. The small flat-top case previously containing this exhibit now illustrates sex differences in the skeleton, while another case shows variations in head size, including the smallest and largest known human skulls.

The addition of an under scientific helper to the staff on July 16, 1942, made it possible to rearrange much of the storage section. He took up the work where the W. P. A. workers had left off—checking contents of drawers with labels, making new labels, and bringing together separated parts of individual skeletons. As a result, most of the study collections now are more easily available than ever before.

The extensive revision of the division's catalog, begun last year, was carried to completion by Mrs. M. B. Murphy, clerk-stenographer, early in the fall. Following the revision of the catalog, work was begun on the index to the Hrdlička collection of reprints. These reprints, which Dr. Aleš Hrdlička, associate in anthropology, donated to the divisional library, are now filed in boxes of uniform size, numbered consecutively. Thus far attention has been given only to reprints pertaining to Latin America.

Anthropological laboratory.—The chief preparator, Andreas J. Andrews, supervised the modeling, casting, repair, and restoration of the many anthropological specimens. In collaboration with the division of physical anthropology he completed a bust and piece mold of an average 18-year-old white male derived from the composite measurements furnished by the division of physical anthropology. The casts were used in our laboratory for experimental purposes by the Bureau of Aeronautics, Equipment and Materials Section, of the Navy Department, for designing a combination pilot's helmet, goggles, and oxygen mask. Subsequently other casts of this bust were furnished to the National Bureau of Standards.

For the division of archeology Mr. Andrews repaired and restored several large prehistoric pottery vessels and a Mexican sculpture. Nine aboriginal baskets from caves and pueblo ruins were cleaned and repaired and several stone objects were repaired. For the division of ethnology the bronze statues in the Herbert Ward alcove were waxed and polished; two suits of armor were repaired, polished, and a preservative applied; a ceremonial mace from New Caledonia and 15 metal knives and spears were cleaned and treated with a preservative; crossbows and an Indian bandolier were repaired; 56 broken earthenware vessels from the American Southwest were restored; and considerable assistance was given in the poisoning of specimens in storage cases. For the division of physical anthropology two Teton Sioux busts were modeled from facial masks and cast;

and 19 new bases with raised inscriptions for Indian busts were completed.

A plaster cast of a life-sized model was completed for the division of history in connection with its exhibition of period costumes. A bust of Benjamin Franklin was cast for the division of graphic arts. Other casts and repairs were made for the division of invertebrate paleontology and the National Collection of Fine Arts.

INVESTIGATION AND RESEARCH

Considerable research was required of the staff in the department of anthropology in order to supply the information requested by various military agencies, the Smithsonian War Committee, and the Ethnogeographic Board, in addition to the time required for the identification of specimens submitted to the department. At the same time several anthropological manuscripts were completed for publication. An article entitled "Archeological Accomplishments during the Past Decade in the United States," by the head curator, was published during the year in the Journal of the Washington Academy of Sciences. He also prepared an article entitled "Archaeology: Western Hemisphere" for the 1943 Britannica Book of the Year. G. D. McCoy, clerk-stenographer in the office of the head curator, summarized the W. P. A. archeological quarterly reports that had been turned over to the Smithsonian Institution, covering the W. P. A. archeological investigations on more than 567 sites in 254 counties within 24 States.

As secretary of the Advisory Board of the National Park Service, the head curator attended two conferences of the Board at the new Park Service headquarters in Chicago, Ill. On August 17, 1942, he was appointed general defense coordinator of the Smithsonian group of buildings excluding the National Gallery of Art.

More than 60 lots of specimens were submitted to the department for identification and subsequently returned to the owners. During the year 476 replies were made to letters requesting anthropological data. In addition to the identification of anthropological material, many visitors and correspondents were supplied with information in connection with old china, silver, and musical instruments.

Archeology.—Besides the studies connected with the installation of archeological exhibitions, the curator of archeology, Neil M. Judd, completed his analysis of basketry, matting, and other fabrics from prehistoric Pueblo Bonito, N. Mex., and made considerable progress with the bone artifacts. Dr. Waldo R. Wedel, associate curator, early in the fiscal year began study of his 1939 collections from Scott County, Kans., but put this aside in order to accompany M. W. Stirling on the 1943 Smithsonian Institution-National Geographic Society Expedition to La Venta, Tabasco, Mexico. For the Atlas

of American History Dr. Wedel reviewed his data relative to Coronado's route in 1541 from Pecos, N. Mex., to Quivira, in central Kansas; in addition, he read the proofs of Bulletin 183 of the U. S. National Museum, entitled "Archeological Investigations in Platte and Clay Counties, Missouri."

As in previous years, Associate Curator Wedel has conferred with various institutions and individuals who submitted directly to him archeological material from the Great Plains and Upper Mississippi Valley, in addition to material from nearby Maryland and Virginia. The curator likewise has been asked to assist both Government bureaus and individuals. Twelve lots of archeological material were received for examination and report and subsequently returned to the senders.

Ethnology.—The classifying and cataloging of ethnographic and auxiliary collections and supplying information requested by individuals, organizations of a private or public character, the several war agencies, and the armed forces involved considerable compilation of anthropological data. This type of research continuously occupied the staff to the almost complete exclusion of a second and more original type of research that has for its aim the verification or revision of accepted conclusions regarding man and culture. The curator, H. W. Krieger, prepared a manuscript on the peoples of Micronesia and Melanesia for one of the Smithsonian War Background Studies.

Governmental departments and agencies used the division's resources continuously throughout the year. Many classes of specimens were examined and sketched. Skin garments and footgear of Arctic peoples were singled out for special study by the Quartermaster Corps of the U. S. Army, as well as by several scientific divisions of the Government. The division's library was combed for every available scrap of information constructive to the war effort. The demand by individual correspondents and visitors as well as other Government bureaus for photographs from our negative files is steadily increasing. This involves the assembling of appropriate pictures for selection, as well as of specimens to be photographed, and the identification and captioning of the prints.

Eighteen written reports were made pertaining to the examination and identification of a total of 41 specimens for private individuals. The number of visitors to the offices of the division seeking information or an informal report on specimens brought for examination and identification exceeded that for the previous year. The study of ceramics, silver, and pewter is of never-failing interest to the public and involves considerable assistance on the part of the staff in addition to the compilation of information for distribution to interested correspondents. Visitors and correspondents show an increasing

interest in the care and preservation of antiques and family heirlooms and request advice regarding technical methods of repair and preservation.

Physical anthropology.—Curator T. Dale Stewart continued his research throughout the year on the physical anthropology of South American Indians. This project, which is intended to summarize our information on the human skeleton for the Handbook of the Indians of South America, has necessitated the examination and verification of several hundred references. It has involved also the collecting of measurements and their statistical analysis, where adequate. These data show a clear-cut geographical segregation of skull size among the Indians of South America that roughly parallels the distribution of stature: the largest peoples in the East and Southeast and the smallest in the West and Northwest. Skull shape, however, except relative head height, fails to show definite segregation. Low-headed skulls are localized in the northern part of the continent, a fact that may be significant historically in view of the occurrence of this feature in western North America and probably in Middle America.

The curator prepared an article on "Food and Physique" for the volume of "The Annals" (American Academy of Political and Social Sciences) devoted to "Nutrition and Food Supply: The War and After." Other articles prepared by him during the year are: "Skeletal Remains from Paracas, Peru," "Distribution of Cranial Height in South America," "Relative Variability of Indian and White Cranial Series," and "Natives of the Indo-Pacific Islands." The first three of these articles were prepared for the American Journal of Physical Anthropology; the last for the U. S. Navy.

The associate curator of physical anthropology, Dr. Marshall T. Newman, also was engaged, up to the beginning of his military furlough, in research pertaining to South America. Having prepared a manuscript while in Peru on the skeletal remains that he had collected there, he undertook during his short stay in Washington to synthesize all the published data on undeformed Peruvian crania. As a further contribution to this subject he measured all the crania in the national collections from San Damian, in the central highlands. The results of this work were published in an article entitled "A Metric Study of Undeformed Crania from Peru."

The former curator, Dr. Aleš Hrdlička, now associate in anthropology, worked on his Alaskan reports during most of the year. When they were completed and in press, he began to analyze his assembled data on human tibia.

The curator furnished reports in a form for publication on skeletal remains from Mancos Canyon, in southwestern Colorado, which represents the late Basket-Maker and early Pueblo cultural periods,

sent in by Erik K. Reed, of the National Park Service; as well as a report on material from the Sugar Run site in northwestern Pennsylvania, associated with an eastern Hopewellian cultural period, sent in by C. E. Schaeffer, of the Pennsylvania Historical Commission.

On four occasions Dr. Hrdlička or Dr. Stewart identified skeletal remains brought in by agents of the Federal Bureau of Investigation. Two lots of bones were submitted by private individuals for examination and report.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

During the year the department distributed 354 items, including plaster models, photographs, and specimens, as loans, transfers, and gifts to other Government bureaus, museums, schools, colleges, and private organizations, for exhibitions and other educational purposes. Two miniature plaster models of the Aztec Calendar Stone were made for the Office of Education, Department of the Interior.

NUMBER OF SPECIMENS UNDER DEPARTMENT

At the close of the fiscal year, the department of anthropology was credited with a total of 711,117 cataloged specimens, representing a net increase of 2,481. The following summary indicates the distribution of specimens as assigned to the various divisions and sections within the department:

Archeology	479, 295
Ethnology	182, 517
Ceramics	7, 563
Musical instruments	2, 413
Period art and textiles	2, 203
Physical anthropology	37, 126
Total	711, 117

DEPARTMENT OF BIOLOGY

(WALDO L. SCHMITT, *Head Curator*)

AT A period when the Nation is dedicated to war a decrease in the number of accessions to the collections of the National Museum is expected, but as a result there is more time available to our staff for concentration on the Museum's contribution to the war effort. The role that the department of biology plays in this war is far from a passive one, though, by their nature, the services rendered must at this time remain in part at least confidential. Much information, the more valuable because so much of it is first-hand, of people, places, and natural resources has been furnished to our armed forces and active war agencies.

In the furtherance of the aims of the Division of Cultural Relations of the Department of State, three members of our scientific staff have recently completed successful missions to Latin America: Ellsworth P. Killip spent the months of March and April and most of May in Venezuela assisting Dr. Henri Pittier, director of the Servicio Botánico, and his associates in Caracas in the identification of large collections of plants from little-known parts of the republic. Several short collecting trips were undertaken, of which the most important was in company with a party of investigation from the Rubber Reserve Corporation to the Río Paragua in Venezuelan Guyana. Dr. Remington Kellogg spent the greater part of the period from March to mid-May in Brazil, giving particular attention to research work involving Brazilian mammals suspected of being or known to be the hosts of vectors of transmissible diseases, and collaborating with members of the staffs of the Museu Nacional at Rio de Janeiro, the Departamento de Zoologia at São Paulo, and the Museu Goeldi at Belém. Considerable time was devoted to the editing of a folio memoir on certain groups of mammals of Amazonia prepared by Dr. Eladio da Cruz Lima. Dr. Waldo L. Schmitt, during April, May, and June, visited Brazil, Uruguay, and Argentina, where he consulted with members of the staffs of a number of the leading museums interested in the study of invertebrates, discussing research problems of mutual interest, particularly those affected by the war, and examining collections of fresh-water Crustacea. In the course of his travels he gave eight lectures before university, museum, and other scientific groups. Generously assisted by state officials, museum staff members, and members of the sanitary and malarial control services, he was enabled to make collections of fresh-water crustaceans in several localities in each of the countries visited.

The present holder of the Walter Rathbone Bacon Traveling Schol-

arship, Philip Hershkovitz, continued his mammal collecting in northeastern Colombia with gratifying success. Under the W. L. Abbott fund, M. A. Carriker, Jr., was in the field from July to September 1941 and began another expedition in May 1942, making further collections of the Colombian avifauna. W. A. Weber, also traveling under the Abbott fund, secured some 600 bird skins during a four months' trip to Tabasco, southeastern Mexico, while accompanying an archeological expedition sponsored jointly by the Smithsonian Institution and the National Geographic Society.

Locally, Dr. L. P. Schultz devoted several days to the collection of fossil fish remains at Scientists Cliffs, Md. Some field work was undertaken in and about the District of Columbia by various members of the U. S. Bureau of Entomology and Plant Quarantine who are located in the Museum, principally by Dr. W. H. Anderson and Louise M. Russell, for the purpose of securing beetle larvae. As a result, a very extensive collection was obtained, and the larvae and adults of 25 species were definitely associated. Fifteen species of larvae obtained were previously unrepresented in the Museum collection. Dr. Paul Bartsch, assisted by members of his staff, continued his field studies on the breeding of the fresh-water snail *Goniobasis* in the Shenandoah and Potomac Valleys. Field work in connection with the survey of the butterflies of Virginia, which has been carried on in past years by Austin H. Clark, was this year restricted to 2 weeks in the vicinity of Mount Solon.

With the death of Dr. Leonhard Stejneger on February 28, the Department and the Museum suffered an irreparable loss. He had been head curator of the department of biology for the past 32 years. As man and as scientist, he was noted for his breadth of knowledge, depth of understanding, and, above all, for his clear thinking. In him we have lost a good friend and a wise counselor.

Dr. Mary J. Rathbun, for more than half a century associated with the National Museum as the chief organizer and for many years the active head of the division of marine invertebrates, died on April 4. The present high standard of excellence of the invertebrate collections and the system of record-keeping that she instituted are themselves heritage enough, without the generous provision in her will bequeathing $10,000 to the division for the purpose of continuing the scientific work on Crustacea which she began.

The microfilming of the Museum's catalogs by the National Archives as a safeguard against wartime hazards is one of the noteworthy accomplishments of the year. It is also of great interest to note here the transfer of the valuable study collection of fishes of the former U. S. Bureau of Fisheries to the Museum, coincident with the removal of the Fish and Wildlife Service, with which the Bureau was merged,

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to Chicago. In all, about 50,000 specimens of fishes were involved in the transfer, including the Bureau of Fisheries reserve series, totaling 2,143 catalog entries, among which are listed 104 types.

ACCESSIONS

Accessions for the year aggregated 704, with a total of 213,823 specimens. The marked falling off in the number of accessions is a direct result of the stepping up of the war and of the Nation's wholehearted support of all that pertains to it. There are 236 fewer accessions this year than last, accompanied by a corresponding reduction in the number of specimens received by each division in the department except one. Only the division of fishes showed an increase in the number of specimens received, this as a result of the removal of the Fish and Wildlife Service to Chicago, as noted above. The more noteworthy accessions are listed under the various divisions as follows:

Mammals.—Important mammalian specimens include the following: The first complete skeleton of the African bush elephant, *Loxodonta cyclotis*, to come to the national collections, a gift from the Philadelphia Zoological Garden; 5 Virginia deer collected in the Virgin Islands by Harry A. Beatty and donated by him to the Museum; 27 mammals collected by the George Vanderbilt Sumatran Expedition, on Sumatra and Nias, a gift from the Academy of Natural Sciences of Philadelphia; 24 small mammals, principally from the Maracaibo Basin, Venezuela, collected by Dr. L. P. Schultz; 37 mammals collected by Walter A. Weber in Tabasco, Mexico; 10 pinniped and 8 porpoise skulls from the Pacific coast, a transfer from the Fish and Wildlife Service; 42 Missouri coyotes and dogs, a transfer from the Fish and Wildlife Service; 4 small rodents collected in the endemic plague area in the Province of Tomina, Department of Chuquisaca, Bolivia, a transfer from the Pan American Sanitary Bureau; and 58 mammals from the National Zoological Park.

Birds.—Various items of the widely scattered collections of the United States Exploring Expedition of 1838–1842 continue to come to hand from time to time. A number were included in a collection of 149 birds from various parts of the world recently presented to the National Museum by Georgetown University. Particularly welcome among the year's accessions are three skins, representing the pheasant genus *Anurophasis* and the shrike genus *Eulacestoma*, of New Guinea birds new to our collections, obtained in exchange from the American Museum of Natural History; the type of the warbler *Prinia flaviventris delacouri*, an exchange from the Princeton Museum of Zoology; 2 specimens of another form new to the collections, the black-lored grass warbler, *Cisticola nigrilora*, an exchange from the Museum of Comparative Zoölogy; and the skins of 65 species of Ecuadorian birds heretofore not represented in our collections, obtained by purchase.

Other important ornithological material accessioned includes Col. L. R. Wolfe's gift of 8 bird skins and the head of 1 bird from Eritrea, a locality unrepresented in the Museum collections; 80 bird skins and 1 bird skeleton from the late J. H. Riley; a gift of 56 bird skins from Georgia and Florida from H. L. Stoddard; 593 bird skins and 14 bird skeletons from Tabasco, Mexico, collected for the Museum by Walter A. Weber under the W. L. Abbott fund; 29 bird skins from Venezuela, a gift from the Carnegie Museum; 74 bird skins from North Africa, given to the Museum by Dr. A. J. Tacquin, of Safi, Morocco, and received through the kind intermediation of Ensign A. G. Humes; 63 bird skins collected by Harry Malleis in Guatemala, transferred from the Fish and Wildlife Service; and 6 lots containing 86 skeletons, 18 skins, and 2 eggs from the National Zoological Park.

Reptiles and amphibians.—An especially fine series of Haitian reptiles and amphibians received from Anthony Curtiss contained the second known specimen of a rare genus and species of snake, *Darlingtonia haetiana* Cochran. From Venezuela Dr. L. P. Schultz brought back an exceptionally fine series of the dwarf Surinam toad, *Pipa parva*, showing free-swimming tadpoles in all stages and adults with the eggs encysted in the thickened skin of the back, where they are kept until a fairly advanced stage of development is reached. Harry A. Beatty sent in a very complete collection of the frogs, lizards, and snakes of the Virgin Islands area, including two specimens of the rare blindsnake *Typhlops richardii* from St. Thomas.

Fishes.—The outstanding event of the year in the division of fishes was the transfer to the Museum of the extensive collection of fishes maintained by the former U. S. Bureau of Fisheries, now merged with the Fish and Wildlife Service. Another large collection accessioned this year consisted of 34,700 specimens brought to the Museum by Dr. L. P. Schultz from the Lake Maracaibo region of Venezuela in the spring of 1942. Type and equally valuable material was received as follows: From the Fish and Wildlife Service 49 gobies, comprising 3 holotypes and 46 paratypes; from the California Academy of Sciences an exchange of 21 specimens, including 6 paratypes; a gift of 2 paratypes of *Notolepidomyzon intermedius* Tanner from Dr. Vasco M. Tanner; 2 rare South American fishes, *Ochmacanthus reinhardti* and *Urinophilus erythrurus*, received in exchange from the Natural History Museum of Stanford University; from the Museum of Comparative Zoölogy 6 cotypes of *Cynopotamus biserialis* Garman as well as 564 South American fishes collected by the Thayer Expedition; 286 fishes from Texas and Florida presented by J. L. Baughman; 37 fishes from Colombia from Cecil Miles; and 61 fishes, mostly from the Río Cauca, Colombia, from the Escuela Superior de Agricultura Tropical, through Mr. Miles.

Insects.—Foremost among the year's entomological accessions were the following: The balance of the private collection of the late George P. Engelhardt, long a generous friend of the Museum, comprising 4,300 miscellaneous insects, accompanied by his extensive and valuable personal entomological library; a gift of six very rare trap-door spiders, *Cyclocosmia truncata* (Hentz), from Tennessee, collected by the donors, William M. Wheeler, Jr., and Paul Wheeler, the third known occurrence of this species since its discovery a century ago; and a collection of over 300 insects obtained by Maj. W. L. Jellison in Yunnan Province, China, brought out by mule, truck, and finally by air to India, and from there to the United States by ship. From the Department of Agriculture approximately 46,000 miscellaneous insects were received by transfer during the year. A large part of this material was supplied by South American investigators of the Bureau of Entomology and Plant Quarantine, while other desirable lots came from the bureau's Division of Foreign Plant Quarantines, the result of interceptions at various ports of entry.

Marine invertebrates.—This year five accessions brought much valuable type material to the Museum's collections of marine invertebrates, viz: Types, allotypes, and paratypes of 13 new species of crayfishes from Dr. Horton H. Hobbs, Jr.; types and paratypes of 7 new species of echiurid worms from Dr. Walter K. Fisher; the holotypes of 4 branchiobdellid worms from Dr. Clarence J. Goodnight; holotypes, allotypes, and paratypes of 4 new ostracods from C. Clayton Hoff; cotypes of 3 species of fresh-water amphipods from Leslie Hubricht; and from Prof. Robert W. Pennak the cotypes of a new crustacean, *Derocheilocaris typicus*, upon which a new genus, new family, and new order were based. A noteworthy transfer was received from the New Orleans laboratory of the shrimp investigations of the Fish and Wildlife Service, consisting of about 700 specimens of well-preserved, well-sorted, and partly identified invertebrates, chiefly from the Gulf of Mexico. Capt. Robert A. Bartlett again brought back from northern waters a miscellaneous collection of marine invertebrates, in continuation of his annual donations of the past decade.

Mollusks.—One of the important mollusk collections of North America was left to the Museum by the late Dr. Frank C. Baker, together with 17 bound volumes of his own published writings. This collection comprises approximately 10,000 specimens and includes the types of many species described by the donor. Collections including type material were received from Miss Marie E. Bourgeois, Dr. B. R. Bales, A. Sorensen, Maxwell Smith, V. D. P. Spicer, Museum of Comparative Zoölogy, Miguel L. Jaume, Academy of Natural Sciences of Philadelphia, and Capt. William Osment. By purchase, in part through the Frances Lea Chamberlain fund, 264 operculate land

shells were obtained from Mrs. Weena C. Fulton, of England. Other sizable collections were received as follows: From Oscar Haught, 4,000 specimens from Ecuador; 175 Arctic mollusks from Capt. R. A. Bartlett; 377 specimens collected in Venezuela for the Museum by Dr. L. P. Schultz; 300 mollusks resulting from the Peruvian investigations cooperatively carried on by the U. S. Fish and Wildlife Service and the Peruvian Government; and 1,700 specimens from the Gulf of Mexico shrimp investigations of the Fish and Wildlife Service. Of special interest is a donation of 1,500 shells from the island of New Caledonia, received from the National Geographic Society and Maj. Gen. A. M. Patch. This material is the first of any consequence received from this now important part of the world in many years.

Helminths.—Twelve of the 17 helminthological accessions received during the year contained type material, as follows: From Ralph F. Annereaux, type specimen of *Opecoelina pharynmagna* Annereaux; from Prof. Dr. Eduardo Caballero y C., Instituto de Biología, Universidad Nacional Autónoma de México, cotypes of *Parallintoshius tadaridae;* from Miss María Cristina Cerecero, of the same school, cotype of *Euparyphium ochoterenai;* from Ellsworth C. Dougherty, University of California, holotype and allotype of *Halocercus kirbyi* Dougherty; from Dr. Ralph F. Honess, University of Wyoming, type and paratype of *Protostrongylus frosti;* from Prof. R. Chester Hughes, Oklahoma Agricultural and Mechanical College, 8 slides bearing cotype specimens of *Hymenolepis parvisaccata* and 39 slides representing four new species; from Arthur W. Jones, University of Virginia, types of *Protogynella blarinae* and *Diorchis reynoldsi;* from Prof. David Richard Lincicome, University of Kentucky, paratypes of *Corynosoma obtuscens;* from Dr. H. J. Van Cleave, University of Illinois, paratypes of Acanthocephala; and from Prof. Richard N. Winger, University of Wyoming, type of *Protostrongylus agerteri.* Dr. Benjamin Schwartz, chief of the Zoological Division, U. S. Bureau of Animal Industry, also reports the receipt of 280 new lots of specimens.

Corals.—Among the material accessioned by the section of corals were the types of six corals transferred to the Museum by the Fish and Wildlife Service and 50 corals from New Caledonia received from Maj. Gen. A. M. Patch and the National Geographic Society.

Echinoderms.—The New Caledonia echinoderms received through the National Geographic Society and Maj. Gen. A. M. Patch constitute the most interesting of the current accessions. A small collection presented by Capt. R. A. Bartlett form the basis of a recently published report by the curator, A. H. Clark, and Gordon J. Lockley, of the British Museum.

Plants.—Among the more important botanical accessions is an ample and well-prepared series of 2,353 plants from little-explored

parts of Colombia received in continuation of exchanges with the Instituto de Ciencias Naturales, Bogotá, with which we are cooperating on a descriptive Flora of Colombia. Other exchanges include: 1,957 specimens from various regions, from the Gray Herbarium; 3,405 specimens from many sources, from the Arnold Arboretum; 1,754 specimens, mostly from Panama, from the Missouri Botanical Garden; 1,546 specimens, mostly from Florida, Bolivia, and Papua, from the New York Botanical Garden; 1,500 specimens, mostly from Guatemala, from the Field Museum of Natural History; 2,102 specimens, mostly from Texas, Mexico, and Haiti, from the University of Michigan; 585 specimens from northern Mexico, from Stanford University; 301 specimens from the western United States, from the University of California; 285 specimens, mostly from California, from the California Academy of Sciences; 400 specimens from Kentucky, from the University of Kentucky. Ten noteworthy accessions consist of plants presented to the National Herbarium by their respective donors, the first five of these with requests for identifications, as follows: 729 specimens of Venezuelan plants from Prof. H. Pittier; 536 specimens, mostly from Haiti, from L. R. Holdridge; 2,100 specimens from Virginia and West Virginia from H. A. Allard; 750 specimens from Martinique from Dr. H. Stehlé; 512 specimens from the Hawaiian Islands from Otto Degener; 902 specimens, mostly from the western United States and eastern Asia, from Dr. R. Kent Beattie; 401 grasses from many regions from Mrs. Agnes Chase, custodian of grasses; 515 specimens from California and Colorado from E. P. Killip, associate curator; 450 specimens from the eastern United States from C. V. Morton, assistant curator; 764 specimens from the eastern United States and eastern Canada from Dr. E. H. Walker, assistant curator. Two other valuable collections are 1,355 specimens, mostly grasses, received as a transfer from the Department of Agriculture, and 947 Mexican plants obtained by purchase.

INSTALLATION AND PRESERVATION OF COLLECTIONS

The removal of the types from all biological collections in the building to safer storage elsewhere, when this could be done without detriment to the specimens concerned, has been virtually completed. All reasonable precautions have been taken to safeguard the materials still remaining in the building against the threat of bomb damage. With these two vitally important tasks now behind us, we can again turn to those things which, in the ordinary course of events, are more properly Museum functions.

On the whole, because of lack of time and manpower, few changes have been made in the exhibition series. However, 13 specimens of various kinds, birds, fish, and a ground squirrel, were mounted and

placed on exhibit. The old moose group in the west main hall was dismantled, and the North American small-mammal exhibition cases were rearranged as the result of the space so released. Behind the scenes considerable progress was made on several larger groups in preparation. Eight large birds, chiefly penguins, and the mold and cast of a crab-eater seal were completed for the Antarctic group, three handsome beavers for the beaver group, and many of the accessories for the Virginia deer group. In addition, considerable work was done for the Pan American Union on its exhibits of South American birds, and the biological section of the Smithsonian Index Exhibit was dismantled, overhauled, rearranged, and reinstalled.

The division of mammals, despite the acquisition of new cases, is still having difficulty in finding storage space for its ever-growing and valuable skull collection. The skin and alcoholic collections continue in satisfactory shape. For the study series the taxidermist force has skinned, made up, or remade a total of 122 skins, of which more than a fifth were of large size. The osteologists cleaned 99 skeletons and 994 skulls and removed 3 alcoholics; 18 skeletons were roughed out; 3 sets of leg bones, an African bush elephant skeleton, and one set of whale ribs were cleaned; and 6 young whale skulls were assembled.

The division of birds has energetically continued the rearrangement, reidentification, and labeling of its study series of bird skins, this year covering in whole or in part the material of nine families: Fringillidae, Thraupidae, Icteridae, Compsothlypidae, Coerebidae, Turdidae, Troglodytidae, Alaudidae, and Tetraonidae. A checking of specimens for types and inadequate labels has accompanied the reworking of the collection. The catalogs of the scientific names and of published illustrations of birds have been continued. During the year 73 birds were skinned and made up by the taxidermist force, 54 degreased and made up, 10 degreased, 267 skeletons cleaned, 78 roughed out, and 3 eggs blown.

The already crowded alcoholic stack and dry storage of the division of reptiles and amphibians is now taxed to capacity with the recent intercalation of the material held in his office by Dr. Stejneger. It became necessary to encroach upon space formerly occupied by the superintendent of the building in order to accommodate 50 quarter-unit cases of turtle skins. This year the taxidermists tanned and made up 18 turtles and skinned 18 more, 15 turtle skulls were cleaned, 5 others were alcoholically preserved, and 4 lizard skeletons and 11 lizard skulls were cleaned.

The transfer of the large fish collections of the Fish and Wildlife Service to the National Museum threw a considerable burden of work on the division of fishes. Of the 50,000 specimens involved the old

U. S. Bureau of Fisheries reserve series of 2,143 jars and more than 1,000 large fishes in tanks have been cataloged. This reserve series, so-called, contained a great deal of valuable material, including 13 holotypes, 91 jars of cotypes, and 32 jars of paratypes. The condition of all collections continues satisfactory. The osteological collections, however, are in need of rearrangement.

As a result of arrangements recently concluded with the Surgeon General of the Army, the division of insects will receive for study and housing material of medical importance collected by the Sanitary Corps. In order to facilitate study, additional space has been provided for the use of visiting Army, Navy, and Public Health Service entomologists.

The division of insects is also overhauling its collections as time permits. This year the family Nitidulidae was entirely rearranged and expanded to take care of a considerable accumulation of identified specimens. Work on the Coccinellidae was continued, and additional dissections of males and females were completed.

A serious effort was made by both the Museum and the Bureau of Entomology and Plant Quarantine specialists to finish the segregation of all holotypes in the insect collections, and a great deal of progress was made. About half of the types of Lepidoptera, half of those of Diptera, virtually all the Homoptera (except the aphids and aleyrodids), and a small section of the Coleoptera remain. Work is being continued with each of these groups except the Homoptera, for which there is at present no specialist available. For this group a specialist is needed particularly to single out the types because in many cases they were none too well marked. Otherwise, the segregation of the insect types has been completed. The condition of the insect collection as a whole continues good—excellent in those portions that have been rearranged in the past several years and most satisfactory in the case of the types that had been moved to a safe storage, where they were very recently inspected by the curator in charge of the division. The lack of slide storage equipment, especially needed for the section of ectoparasites and Acarina among others, continues to be one of the division's most pressing problems and is again emphasized. In other directions, particularly with the Lepidoptera, work of the division has been handicapped by the inadequacy of available space and lack of drawers and cork-lined trays. More space and sufficient supplies, when it is possible to secure them, will yield handsome returns in the improvement of the arrangement of all collections.

The redetermining and rearranging of the collections under the supervision of the specialists of the Bureau of Entomology and Plant Quarantine were materially advanced in most insect groups. The shifting of approximately 1,200 drawers brought the members of the respective families and orders of the Orthoptera and neuropterid

insects closely together. Formerly most of these insect groups were distributed through several collections. All the Museum specimens of the order Embioptera, except for undeterminable nymphs and females, have been identified by Lt. Edward S. Ross, of the California Academy of Sciences.

Of the families of the Coleoptera, Dr. M. W. Blackman completely rearranged the several subfamilies of the Scolytidae, placing special emphasis on the groups predominant in the Neotropical region; he also made a beginning on the sorting and arrangement of the Oriental Scolytidae. Preparatory to a comprehensive study of the Bostrichidae, W. S. Fisher completely rearranged the family in accordance with the most recent classification. Among Dr. J. M. Valentine's assignments, the Pyrochroidae, Paussidae, and Rhyssodidae were completely rearranged, as were also several economically important genera of the Elateridae and minor sections of the Carabidae, Anthicidae, and Oedemeridae. Dr. Valentine has pointed out that, although the Museum collection of Elateridae contains a good representation of the Nearctic species, the fauna of central and western Canada is very poorly represented, and that an effort should be made to obtain Elateridae from those areas. Following the completion of his studies on the genus *Phyllophaga*, Dr. A. G. Böving re-sorted all the larval material belonging to this genus and arranged it in proper systematic sequence.

The task of incorporating the very large and valuable Barnes, Owens, Blackmore, and Brooklyn Museum collections of Lepidoptera with those of the National Museum is an important one upon which the lepidopterists of the Bureau have been working as their other responsibilities permitted. Despite the fact that progress has at times appeared discouragingly slow, some commendable progress has been made. During the past year H. W. Capps completed the incorporation of the North American Geometridae of the Barnes, Blackmore, and National Museum collections into one unit. He also rearranged the larvae of the family Oecophoridae in accordance with J. F. G. Clarke's recent revision. W. D. Field completed the tremendous task of incorporating and rearranging all the material in the several subfamilies of Arctiidae, including the large group of Lithosiinae, and the family Satyridae, and began similar work on seven or eight other families of Macrolepidoptera. This has almost been completed for the Pieridae, Danaidae, Hesperiidae, and Megathimidae, in which families the work involved the transfer of nearly 75,000 specimens.

The family Cicadellidae of the Hemiptera was completely rearranged by Dr. P. W. Oman to conform with his manuscript revision of the group before leaving to take a commission with the Sanitary Corps of the Army on October 1, 1942. The family Psyllidae was transferred to Louise M. Russell for supervision. H. G. Barber's re-

tirement interrupted the work on the Heteroptera. His successor, Dr. R. I. Sailer, has, since his appointment in September, identified and placed in labeled trays approximately 500 specimens of Corixidae and 1,300 specimens of the pentatomid genus *Chlorochroa*. Approximately 1,000 specimens of Anthocoridae, mostly undetermined, have likewise been reviewed and transferred from drawers to named trays; and some definite improvement was made in the arrangement of the pentatomid genus *Solubea* and the mirid genus *Lygus*. With the addition of the McAtee collection of reprints, the Museum's library of reprints dealing with Hemiptera has become probably one of the most complete in the world. The entire collection of aphids is now in excellent order, having been expanded since it had become congested at certain points.

The mosquitoes, among the Diptera, received a great deal of attention during the year from Dr. Alan Stone because of their medical importance. Nearly all undetermined *Anopheles* in the Museum were named, a great deal of material from the Orient was critically studied, the determinations checked, and the whole lot sorted geographically. Most of the accumulated tabanid material was identified and arranged to conform with the latest generic classification. M. T. James, who succeeded D. G. Hall, has already checked over and rearranged more than half of the collection of the Stratiomyidae and the Scopeumatidae, of which he is an outstanding authority, correcting numerous misidentifications and naming a rather large accumulation of undetermined material in the process.

Work on aculeate Hymenoptera, since Dr. Karl Krombein's appointment to the Sanitary Corps, has been virtually at a standstill except for the identification of more important material. In the collections of parasitic Hymenoptera R. A. Cushman arranged the material belonging to the Ophionini in accordance with his revisionary study of the group, and A. B. Gahan did the same for certain groups of Eupelmidae and Callimomidae. The collection of Braconidae belonging to the subfamily Aphidiinae was completely reworked by Dr. Clyde F. Smith, of North Carolina State College, and since its return has been rearranged in accordance with Dr. Smith's scheme of classification. The genus *Atanycolus* is now arranged to correspond with the classification of Dr. Roy D. Shenefelt, of Washington State College, who has recently studied the group. Many improvements have been made in the ant collection, the material of various economic genera being restudied and rearranged.

It is gratifying to record that the card catalogs of the Hymenoptera have been brought reasonably up to date after a lapse of almost 15 years.

The thrips genus *Frankliniella* was revised by Dudley Moulton, of Redwood City, Calif., in the course of a 6 months' appointment,

during which he reviewed and reclassified approximately 1,800 slide preparations. On its return, the entire material was properly arranged in the Museum's collection of Thysanoptera by J. C. Crawford.

In the section of ectoparasites the slide preparations of chigger mites were rearranged to correspond with the generic revision developed this year by Dr. H. E. Ewing. During the past year new labels were made for practically the whole of the preserved Collembola material, which has now been expanded and arranged in accordance with the most recently published classification.

An overhaul of the alcoholic and dry study collections of the division of marine invertebrates has recently been completed, and as a result the study collections are in very good shape. The work continues in the echinoderm collections in similar fashion.

In the division of mollusks the care of collections, by virtue of the magnitude of the task, has been confined largely to the segregation of types. The helminthological collection is kept in excellent shape by members of the staff of the zoological division of the Bureau of Animal Industry.

In the division of echinoderms a rechecking of the dry types has been nearly completed.

In the division of plants 16,678 specimens of flowering plants and ferns were mounted, wholly by adhesive straps, 11,198 of these by contract and 5,480 by Mrs. Eleanor C. White, who, in addition, repaired 3,225 specimens and mounted about 3,600 photographs, typed or printed descriptions, and reference labels on herbarium sheets. During the year 28,856 specimens were stamped and recorded and thus made ready for the Herbarium, leaving only about 2,500 still unstamped. An accumulation of nearly 18,000 specimens awaits mounting. Because of lack of help, about 10,000 fewer specimens were mounted than during the preceding year. This is a condition for which some remedy needs to be found if the Herbarium is to function efficiently and render maximum service. Of mounted, stamped, and recorded specimens, including sheets bearing descriptions, there are about 60,000 awaiting incorporation in the Herbarium, of which about 50,000 are from continental America. Their distribution has been facilitated by the availability of the 40 cases vacated when the type specimens were sent to a safer storage. Because of the great increase of South American material received for identification since the threat of war arose in 1939, amounting to 23,800 specimens in four years, E. P. Killip has found it expedient to combine such identification work, family by family, with the distribution of mounted specimens into the Herbarium. This plan worked so well that C. V. Morton is following it in working up large collections from the southwestern United States, Mexico, and Central America. The task of segregating type specimens is being continued with excellent results, the number

now segregated totaling 42,834. Nearly one-half of this increase of 14,514 specimens over last year's total consists of ferns and Philippine flowering plants. The remainder consists of 7,485 grass types, which had been carefully segregated over a period of many years but never included in previous totals of the so-called Type Herbarium.

E. C. Leonard, in charge of the cryptogamic collections, incorporated a large series of mosses and hepatics from Virginia and a considerable number of lichens and algae in those collections. The C. G. Lloyd mycological collections, in charge of John A. Stevenson, honorary curator, have been removed to new fireproof quarters at the Bureau of Plant Industry Field Station at Beltsville, Md.

INVESTIGATION AND RESEARCH

The curator of mammals, Dr. Remington Kellogg, reports further progress with his accounts of the fossil whalebone whales of the family Cetotheriidae, with his studies of several extinct cetaceans from the Miocene and Pliocene of Florida, and on the taxonomy of South American porpoises, particularly the genera *Sotalia*, *Stenella*, and *Cephalorhynchus*. During his visit to Brazil and subsequently Dr. Kellogg assisted with the editing of a large folio memoir prepared by Dr. Eladio da Cruz Lima on the monkeys of Amazonia. Dr. David H. Johnson, associate curator, is making a study of variation in the dwarf buffaloes, genus *Anoa*, and continues his investigations on the taxonomy of the North American squirrels. The identification of quantities of mammal bones found during the excavation of numerous archeological sites in seven different States and in caves in Coahuila, Mexico, occupied a great deal of the associate curator's time. Gerrit S. Miller, Jr., research associate, was engaged during the year revising his "North American Recent Mammals."

The curator of birds, Dr. Herbert Friedmann, continued work on the gallinaceous birds for part 10 of Ridgway's unfinished monograph, "The Birds of North and Middle America." In this connection he published three papers on as many genera of game birds, one jointly with Dr. J. W. Aldrich on the complicated variations of the ruffed grouse. He also completed a study of the birds collected in the Antarctic by the United States Antarctic Service Expedition under Admiral Byrd and continued the study of the Venezuelan-Brazilian collection made by E. G. Holt, besides writing a number of critical reviews of recent ornithological literature. His account of the natural-history background of camouflage written for the Smithsonian's War Background Studies is in demand both in civilian and in military circles. Some West African honey-guides were studied for the Carnegie Museum. Furthermore, he published two papers on South American birds, one in conjunction with the associate curator. The associate curator, H. G. Deignan, divided his time between work on the birds of northern

Siam, now approaching completion, and what has proved to be a most profitable research into the records and catalogs of the collections, uncovering many unexpected types and correcting many errors. He published a number of papers dealing, respectively, with the bibliography of Thai ornithology, a revision of the difficult warbler genus *Prinia*, on a little-known pheasant, *Gennaeus crawfurdii*, and a number of short notes on local birds. He was also joint author with the curator of a paper on South American birds, and contributed a paper on Thailand to the Smithsonian's War Background Studies. The assistant curator, Walter A. Weber, though away in the field for a third of the year, devoted considerable time to problems associated with the exhibition collection. Dr. Wetmore completed and published a report on the birds of southern Veracruz and in connection with this published descriptions of several new birds from the region. Besides describing a new form of the curious helmeted curassow *Pauxi* from Venezuela with W. H. Phelps, of Caracas, he published several shorter notes on bird bones, recent and fossil, and prepared a biographical memoir on the late J. H. Riley.

Dr. Doris M. Cochran continued studies on South American frogs, and completed one of the most popular of the Smithsonian's War Background Studies, on the poisonous reptiles of the world. Subsequent to Dr. Stejneger's death on February 28, she prepared for publication the section dealing with the soft-shelled turtles of his uncompleted studies on American turtles.

The curator of fishes, Dr. L. P. Schultz, devoted the greater part of the year to a study of the fishes he collected in Venezuela the year previous, completing an important manuscript on the catfishes of that country. Two other manuscripts have been submitted for publication; three others resulting from earlier studies appeared in print.

The curator of insects, Dr. E. A. Chapin, continued his investigations on the genus *Hippodamia* and on certain other groups of Coccinellidae. Dr. R. E. Blackwelder, associate curator, is serving for the duration with the Air Track Corporation, College Park, Md. Before leaving the Museum to begin his war-work assignment, Dr. Blackwelder turned in for publication Part 1 of his "Checklist of the Coleopterous Insects of Mexico, Central America, the West Indies, and South America" and made arrangements to devote his spare time toward the completion of this huge task, which was undertaken at the instigation of the Smithsonian War Committee.

Taxonomic research by members of the staff of the Bureau of Entomology and Plant Quarantine was greatly restricted, principally because of reductions in personnel. In the Orthoptera and neuropteroid insects, Dr. H. K. Townes, recently appointed to take over Dr. Gurney's assignments when the latter entered the Army, spent some time familiarizing himself with these groups and so has had

little opportunity for research. Before being transferred to this section, however, he did accomplish a great deal of work on the Diptera, particularly the Ichneumonidae. Dr. M. W. Blackman's current studies on the Coleoptera resulted in the completion of four papers on new genera and species of Scolytidae, chiefly Neotropical, based in part on Museum material and in part on specimens intercepted at Mexican border ports.

This year Dr. J. M. Valentine gave special attention to the North American Elateridae of the genera *Aeolus* and *Drasterius*, collecting important data that have a significant bearing on the problem of speciation. He has virtually completed the taxonomic analysis, the distribution, and most of the required illustrations. W. S. Fisher gave his research time during the year mainly to the Bostrichidae, nearly completing a revisional paper classifying the North American species. The problem proved to be an especially difficult one, as a number of exotic species seem to have become established in the United States. In the Chrysomelidae, H. S. Barber devoted some time to a restudy of various groups in the large and complex genus *Diabrotica* and in the genera *Lema* and *Rhabdopterus* and began a study of the genus *Rhabdopterus* because of reports of injury to cultivated plants. He completed a paper describing a remarkable wingless hispine beetle from Cuba and completed and published a synopsis of the species of *Rhabdopterus* occurring in America north of Mexico. L. L. Buchanan pursued further the intricate taxonomic problems presented by the so-called white-fringed beetles comprising the subgenus *Graphognathus* of the genus *Pantomorus*. Several distinct species or forms of this large South American group have become established in the United States and have become pests of importance. All the species of the subgenus appear to be parthenogenetic, complicating the taxonomic problems involved. As it has been extremely difficult to define the limits of the supposed segregates that have become established in this country, Mr. Buchanan has undertaken a statistical analysis of several of these forms. Dr. W. H. Anderson continued his critical studies of rhynchophorous larvae, and completed characterizations of the tribes and genera of the subfamily Curculioninae, preparing keys to these groups and to the genera of the Otiorhynchinae. Since this study on rhynchophorous larvae was begun in 1940, approximately 140 genera have been investigated in detail. Dr. A. G. Böving, who had retired, was reinstated when Dr. B. E. Rees joined the Army, and devoted much of his time during the year to a detailed study of the larvae of the family Anobiidae. A key to the genera was prepared and numerous illustrations were completed.

Taxonomic research in the Lepidoptera was much curtailed this year. W. D. Field made some further progress with his studies on the Lithosiinae. Some attention was given to the large revisional

study of the family Phycitidae begun by Carl Heinrich several years ago. H. W. Capps continued with his work on the classification of the family Geometridae. In connection with the classification of lepidopterous larvae begun about a year ago by Mr. Heinrich and Mr. Capps as a joint project, all the available larvae of the families Gelechiidae, Cosmopterygidae, Oecophoridae, Blastobasidae, Stenomidae, Xyloryctidae, Ethmiidae, Momphidae, Epermeniidae, Blastodacnidae, and Scythrididae were thoroughly restudied and the characters of each species charted. In November 1942, August Busck, who had retired, was reinstated to complete the monograph of the Aegeriidae upon which the late George P. Engelhardt had worked for many years.

In the Hemiptera Dr. R. I. Sailer, seeking to determine the specific limits in the pentatomid genera *Chlorochroa* and *Solubea*, reviewed the extensive material in the national collections and in collections borrowed from other institutions. The results of the study of *Solubea* are virtually ready for publication. Some time was devoted to the completion of a paper on the Thyreocorinae of the United States. Dr. P. W. Oman completed a reexamination of the available material in the leafhopper genus *Macropsis*, with special reference to the distributional limits of the species. Louise M. Russell initiated revisional work on the world fauna of the aleyrodid genera *Aleuroglandulus* and *Dialeurodes*. Besides describing a new economic species of psyllid from the Belgian Congo, Miss Russell completed a large paper entitled "The North American Species of the White Flies of the Genus *Trialeurodes*." As other duties have permitted, Dr. P. W. Mason has been revising the aphid genus *Macrosiphum*, the second largest genus of aphids known, with representatives in all the major zoogeographical regions. This study has developed the fact that entirely new sets of characters will have to be discovered before a satisfactory key to the members of this very difficult genus can be constructed.

Dr. Alan Stone's principal long-time research problem covers a revision of the Nearctic Simuliidae. A large amount of material from various sources was determined, assisting the definition of specific limits within the group. Brief periods of time have also been devoted to the Tabanidae of Venezuela. The results of Dr. Stone's studies have been extensively used by the Army in the preparation of a guide to the identification, distribution, habits, and relation to malaria of the anopheline mosquitoes of the world. Several Army officers, as well as Dr. Lloyd E. Rozeboom, of the Johns Hopkins University, participated in the undertaking, which is being published under the authorship of Russell, Rozeboom, and Stone. A study of the most injurious leafminers of the agromyzid genus *Liriomyza* was undertaken by C. T. Greene. He also did some work on dipterous

larvae found to occur abundantly in corn ears in the Southern States and Mexico. A critical study of definitely associated larval material has enabled Mr. Greene to distinguish clearly between two forms of larvae. Lately he has been working on the phorid genus *Megaselia* with the object of defining the species and preparing a synopsis of the North American forms. M. T. James completed a synopsis of the Nearctic species of the stratiomyiid genus *Adoxomyia* and made definite progress on a study of the North American species of *Cordilura* and related genera in the Scopeumatidae. Before taking over the Orthoptera and neuropteroid families, Dr. H. K. Townes gave considerable attention to the family Tendipedidae, completing a revision of the Nearctic species of the tribe Tendipedini.

In the Hymenoptera comparatively little research was carried on except in the ants. R. A. Cushman continued his studies on the ichneumonid tribe Ophionini, completing a revisional key to the genera included in this group. In this connection, he worked up a large collection of Hawaiian material belonging to the genus *Enicospilus*. A. B. Gahan completed revisions of the chalcidoid genera *Arachnophaga* and *Encyrtaspis*. He also gave considerable time to a reclassification of the families of Chalcidoidea, an important undertaking, as nothing of the sort had been published since the classification of Ashmead of 1904. Dr. H. K. Townes, who has accumulated one of the best collections of North American Ichneumonidae in existence, completed a catalog of the Nearctic species. Dr. M. R. Smith completed and published several short papers describing isolated new species of ants of more than ordinary interest. He also completed a generic and subgeneric classification of the male ants, in itself a large and important contribution, as the classifications heretofore have been based almost entirely on the worker caste. He also completed synopses for the ants of the genera *Tetramorium* and *Thaumatomyrmex*.

In the Thysanoptera J. C. Crawford made further progress in working over the eastern species of the important genera *Thrips* and *Sericothrips*, and did a good deal of work on Dudley Moulton's revision of the North American species of the genus *Frankliniella*, preparing it for publication.

Dr. H. E. Ewing's research work on ectoparasites, Acarina, and minor orders was this year confined almost exclusively to the study of the chiggers, as the military establishments were concerned with the control of chiggers at Army camps and desired to have a taxonomic treatment of this group available. Two preliminary papers on the taxonomy of certain American chiggers were completed and published, and an improved technique for the slide preparation of chiggers developed.

As a result of military operations in many mosquito-infested regions, there has been a greatly intensified interest in these insect pests. R. E. Snodgrass therefore undertook and completed a critical anatomical study of mosquito mouthparts and then expanded the work to include the feeding apparatus of all principal biting and disease-carrying flies.

Dr. Waldo L. Schmitt, curator of marine invertebrates, spent some time reorganizing the collections of lithodid crabs in preparation of a taxonomic study of the North Pacific forms of economic importance. During the last 3 months of the year he visited museums and other scientific institutions in Brazil, Uruguay, and Argentina, examining collections of Crustacea, making a special study of the species of *Aegla*, and determining unidentified material. Clarence R. Shoemaker, associate curator, brought to completion his comprehensive report on the very large collection of bathypelagic amphipods amassed by the Bermuda Oceanographic Expeditions of the New York Zoological Society from 1929 to 1931. A large collection of amphipods from the Bay of Fundy, belonging to the Canadian Government, was worked on as time permitted, and the sorting into genera of the large collection of amphipods of the Hancock Pacific Expeditions was continued preparatory to more intensive study of this material. J. O. Maloney, aide, continued the identifications of isopods taken from plant importations by the United States Bureau of Entomology and Plant Quarantine. In connection with his studies on the bryozoan collections, Dr. R. S. Bassler reports considerable progress in picking out the Bryozoa, Ostracoda, small corals, and several other groups from the washings stored in the attic. The entire set of Philippine dredgings was completed, and the material in these several lines is now in shape for detailed study. Dr. J. A. Cushman, honorary collaborator, this year devoted himself largely to stratigraphic problems of prime importance to the successful prosecution of the war. He also completed a short manuscript on the Foraminifera of the United States Antarctic Service Expedition.

The curator of mollusks, Dr. Paul Bartsch, and Dr. Carlos de la Torre, of Habana, after several years of intensive effort, have almost completed their joint study of the Cuban urocoptid land shells. Dr. Harald A. Rehder, associate curator, continued his researches on the Hawaiian gastropods, and also spent considerable time on other problems, especially those dealing with the west Atlantic marine fauna. Dr. J. P. E. Morrison, assistant curator, is carrying forward anatomical studies of the Bulimidae and during the year also completed the descriptions of some new fresh-water bivalves from South America. Researches on the helminthological material were undertaken by various members of the zoological division of the United States Bureau of Animal Industry. Dr. T. Wayland Vaughan and Dr. John W. Wells continued their studies on the corals.

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The curator of echinoderms, Austin H. Clark, continued work on Bulletin 82, "A Monograph of the Existing Crinoids," completing another part of the fourth volume, which includes the account of the remaining family, Colobometridae, of the superfamily Mariametrida, and the accounts of the families Tropiometridae, Calometridae, Ptilometridae, and Asterometridae of the superfamily Tropiometrida. The third part of this volume is nearly completed.

Because of its importance and its magnitude, the completion of the task of segregating all types in the National Herbarium received first attention of all members of the staff of the division of plants. Nevertheless, the curator, Dr. W. R. Maxon, found some time to pursue his study of numerous fern collections from many tropical South American localities. The associate curator, E. P. Killip, made considerable progress with the program he is conducting in collaboration with Colombian and Venezuelan botanists for the thorough study of the flora of their respective countries, identifying a great deal of material in the course of this comprehensive work. E. C. Leonard, assistant curator, completed several papers in continuation of his studies of American Acanthaceae, and nearly completed another on the shale-barren plants of the Massanutten Mountains, Va., in collaboration with H. A. Allard. In connection with extended studies on collections of Cuban plants, largely collected by himself, C. V. Morton, assistant curator, made considerable progress with a synoptic list of vascular plants of that island. Dr. E. H. Walker, assistant curator, published three short papers and began a study of tropical American Myrsinaceae. Mrs. Agnes Chase, custodian of grasses, continued her studies of grasses, especially those of Brazil.

The number of lots of specimens sent in with requests for identification was as follows: Mammals, 41; birds, 41; reptiles and amphibians, 13; fishes, 19; insects, 65; marine invertebrates, 37; mollusks, 49; helminths, 4; echinoderms, 2; plants, 160; a total of 431. There has been a decided number of requests for information other than for identifications. The number of specimens from all sources identified during the year by all divisions approximated 28,000. The division of insect identification of the Bureau of Entomology and Plant Quarantine received over 18,000 lots of insects for determination and 50,000 identifications were made.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions aggregated 1,430 specimens, 1,422 specimens were sent out in exchange, and 689 specimens were transferred to military and naval centers. The 2,026 plants dis-

tributed were sent out as exchanges to 27 institutions and correspondents. This is but a small fraction of the number of plants usually sent out each year. The marked decrease is due partly to the fact that communication with foreign institutions has mostly been cut off, and in large measure also to lack of time, preference having been given to the segregation, cataloging, and safe storage of type specimens and to various war effort activities, including field work and the prompt identification of critical plant materials.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The summary of specimens given below is based on the numbers estimated for the previous fiscal year, with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time. No estimate has as yet been made for the corals, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions lots consisting of minute organisms are frequently counted as single specimens, though they may contain hundreds and even thousands of individuals, the enumeration of which could serve no useful purpose.

Mammals		245, 272
Birds:		
Skins	284, 749	
Alcoholics	10, 068	
Skeletons	18, 047	
Eggs	90, 389	
		403, 253
Reptiles and amphibians		126, 974
Fishes		1, 299, 303
Insects		5, 461, 470
Marine invertebrates		1, 041, 152
Mollusks		3, 010, 654
Helminths		146, 248
Echinoderms		169, 422
Plants		1, 848, 600
Total		13, 752, 348

DEPARTMENT OF GEOLOGY

(R. S. BASSLER, *Head Curator*)

THE past year has been marked by special effort toward placing the reference collections of minerals and fossils in the best order for ready consultation. This is with a view to the near future when more than ever before they will be needed to help in stratigraphic and other geologic studies already planned for the discovery of new deposits of oil, minerals, ores, and other economically important substances. With the war occupying the time and energy of so many people, there was naturally a decrease in the receipt of specimens. It therefore behooved us to take advantage of this condition to bring our work up-to-date and put our house in order for the postwar period, when undoubtedly there will be many additions to the study series through transfers from Government agencies and through gifts of the geologic materials now under study by others as a part of their war work.

The collections in general have as usual been under study by various research workers. The minerals especially have been consulted frequently, particularly by representatives of the war agencies with reference to promising localities for those of strategic use. The size, scope, and quality of our mineral and ore collections have amazed many of the new workers in this field unfamiliar with the Museum. The staff also has been consulted often for information by various branches of the armed forces and other war agencies. This assistance has covered a wide field, ranging, for example, from instruction in geology and mineralogy for those entering specific areas to advice on the hard-rock resources of hitherto little-known regions of the world.

While field work for upbuilding the exhibits has been curtailed, researches in general geology were increased. An economic survey was made in northern Mexico by Dr. G. Arthur Cooper under the auspices of this Institution and the Mexican Geological Survey authorities. This field work, which was conducted in connection with search for war minerals, resulted in the discovery of a long new sequence of Cambrian rocks associated with ore deposits in western Sonora. Dr. Cooper also spent some time in Illinois and adjacent States, where for the first time correlations of Devonian rocks were established in that promising area for new oilfields. Supplementing this work, the publication of Dr. Cooper's correlation of North American Devonian sedimentary formations, upon which he had labored in his spare time for several years, marked an important advance in stratigraphy. C. W. Gilmore, early in the year, successfully completed his explorations for fossil vertebrates in the Brule division of the Oligocene in Niobrara County, Wyo. He was accompanied by Alfonso Segura, of the staff of the Museo Nacional de Costa Rica, San José, who was

invited to join the party for the field experience and training in methods that he wished to apply to his own work in Costa Rica.

Dr. W. F. Foshag, on detail from the Museum, spent the entire year in continuation of his work in Mexico supervising surveys for strategic minerals. Dr. C. Lewis Gazin since July 20, 1942, has been on military detail in the service of the United States Army.

ACCESSIONS FOR THE YEAR

The accessions of new materials for the year number 133, comprising approximately 9,725 specimens. The individual records for the several divisions are as follows: Mineralogy and petrology, 72 accessions (1,686 specimens); invertebrate paleontology and paleobotany, 46 accessions (7,789 specimens); vertebrate paleontology, 15 accessions (250 specimens).

Mineralogy and petrology.—The income from the Roebling fund was responsible for ten accessions pertaining to minerals. Among these were an unusually large scheelite crystal from Moctezuma, Sonora, Mexico; a number of well-crystallized chrysoberyls from near Collintina, Espirito Santo, Brazil; a group of phenacites from Paricicaba, Minas Geraes, Brazil; a green tourmaline group from Figueira, Minas Geraes; a large crystal of aquamarine from Spitskopje, Africa; nephrite from Lander, Wyo.; a group of pyrolusite crystals from Silver City, N. Mex.; some zeolites from Benton County and cinnabar crystals from Jefferson County, Oreg.; sahlinite from Langban, Sweden; and a specimen of ardealite from Transylvania, Rumania.

The largest single accession of minerals was the gift of the John W. Langsdale mineral collection belonging to Georgetown University, whereby many good examples from old American and European localities were added to the collections. This afforded opportunity to improve the quality of our specimens from some of these old inaccessible places.

Through the generosity of Calvin Joyner a number of Chinese-Turkestan jades were received. The Cranbrook Institute of Science presented a number of minerals, the most important of which were well-formed native copper crystals from Michigan and some unusual fluorites from Clay Center, Ohio. Arthur Montgomery continued his interest in the mineral series by donating specimens of microlite from New Mexico. Dr. John P. Marble presented a specimen of thortveitite from Norway and three allanites analyzed in the course of his work on radioactivity. Henry G. Savage donated a specimen of the newly described mineral brodrickite. F. A. Rapp, of the Merchant Marine, forwarded some very good columbite and tantalite specimens, as well as a few crystals of amazonite from Amelia, Va. The following members of the Geological Survey were instrumental in obtaining valuable sets of ores and minerals, which were contained in various transfers from that institution: W. T. Schaller, T. B. Nolan, Miss J. J. Glass, F. C. Calkins, W. B. Lang, and J. Bridge.

The outstanding addition to the gem collection was the 316-carat star sapphire known as the Star of Artaban, a gift of W. Frank Ingram. This most welcome gift ranks with the finest of our individual gems. Another notable gem stone was a 54-carat blue Brazilian topaz obtained through the Frances Lea Chamberlain fund. A strand of Turkestan turquoise beads and several synthetic rubies, reported to have resulted from the first successful experiment of Prof. Henri Moissan, were received as a gift of J. Morgan Clements.

Ten meteorites hitherto unrepresented in our collections were added this year. These comprise a slice of the Somervell County, Tex., meteorite received in exchange from Oscar E. Monnig, and nine other slices purchased through the income of the Roebling fund, as follows: Abernathy and Sanderson from Texas; Atlanta, La.; Aurora, N. Mex.; Hardwick, Minn.; and the Brewster, Garnett, and Otis from Kansas. An additional 1,842-gram individual of the Harrisonville, Mo., fall was also purchased through this fund.

Dr. Stuart H. Perry, associate in mineralogy, presented a 4,640-gram specimen of the Modoc, Kans., meteorite, an example larger than others we had of this meteoritic shower. Dr. Perry also donated an album of five volumes containing nearly 1,500 photomicrographs of the structures in meteoritic irons. Last year he gave the entire set of negatives of this work to the division, so that through the research and generosity of Dr. Perry the most complete existing file of the metallurgy of meteoritic irons is now available in this Museum.

Among the ores received during the past year were two specimens containing free gold from Larco mine, Santander Province, Colombia, donated by Joseph Ulmer. The Stevens Institute of Technology presented two samples of graphite, one from Korea and the other from Madagascar. Ores of tungsten and other metals were obtained from F. W. Horton, of the Bureau of Mines, by exchange for duplicate minerals. William A. Riggs, in continuance of his interest, contributed specimens of mercury and zinc ores from the Arkansas area in which he has been working the past year. Transfers from the Geological Survey included an unusually large bauxite from Wilkinson County, Ga.; tin ore from Cima, Calif.; a large specimen of tungsten ore from Tungstonia, Nev., and another from near Fairbanks, Alaska; and copper ores from South Strafford, Vt.

The most noteworthy addition to the rock collection was a set of unusual concretions containing dufrenite from near Greenbelt, Md., presented by Frank L. Hess and E. E. Fairbanks, of the Bureau of Mines.

Two important additions to the geological collections were received as transfers: One, the rock specimens from southern Edsel Ford Range and Marie Byrd Land, Antarctica, from the United States Antarctic Service, Department of the Interior, and the other, a set of rocks and minerals from the Cottonwood-American Forks area,

Utah, from the United States Geological Survey. Both series have been studied and contain described material.

Invertebrate paleontology and paleobotany.—Sixteen of the accessions in this division record many interesting specimens of invertebrate fossils from the Lower Devonian of Tennessee, Devonian of the Midwest, Missouri, Michigan, Mississippi, Utah, and Ontario, and early Devonian of West Virginia. Of these the most important are the Devonian invertebrates collected in the Mississippi Valley States by Prof. A. S. Warthin, Jr., of Vassar College, and Dr. G. A. Cooper during their investigations in that area. Next in importance were 118 lots of Devonian fossils occurring in cores of deep wells drilled in Illinois by the Shell Oil Co., the donor of the material. Mention should be made here of the results of a former field trip. The etching of 1,400 pounds of fossiliferous Permian limestone blocks from Texas, lent Dr. Norman D. Newell at the University of Wisconsin for study, yielded an abundance of fossils so delicate that it was necessary for them to be transported personally to the National Museum by Dr. Cooper. Among them were unusual sponges of delicate structure and a large number of pelecypods. The latter were left with Dr. Newell for the preparation of a monograph on this subject.

Early Devonian fossils from the Huntersville chert of West Virginia and Virginia for the stratigraphic series formed a gift from Dr. E. E. Rehn, of the Ohio State University. Three other lots totaling 750 specimens from the Devonian formations of West Tennessee were presented by P. P. Fox. Other gifts of Devonian fossils consisted of mollusks and brachiopods from W. A. Kelley and topotypes of Bryozoa from the Museum of Paleontology, University of Michigan, all from the Traverse formation.

In return for assistance by Dr. C. E. Resser, Dr. Franco Rasetti, of Laval University, presented a splendid set of fossils and casts of types from the classic locality at Levis opposite Quebec City, Canada. The specimens, photographs, and casts thus far received from Dr. Rasetti facilitate the identification of our old collections and form such an excellent supplement to them that the National Museum now possesses an extensive representation of these interesting faunas. Casts made by Dr. Resser of the types of Cambrian fossils in the collections at the Museum of Comparative Zoölogy, the Peabody Museum of Natural History, Yale University, and Columbia University, supplied fine reproductions of some 200 species for our study series.

The transfer from the Tennessee Valley Authority of a collection of peculiar crustaceans found in strata of unknown relationship in the Douglas Dam area brought an accession of particular scientific interest. After complete excavation of the dam, the geologists present concluded that these rocks filled an ancient sink hole.

The fossil echinoderm collection was enriched by the purchase of 12 specimens of Devonian crinoids from Ontario through the income of the Springer fund; by the gift of Dr. D. K. Gregor of 50 crinoids from the Silurian of southeast Missouri; by gift of H. L. Strimple of 11 specimens of crinoids from the Mississippian of Iowa and Oklahoma; by gift of Raymond E. Peck of paratypes of 22 species of Lower Cretaceous crinoids from Texas; and by 53 Lower Cretaceous echinoids from Gayle Scott.

In the series of Mesozoic fossils a valuable accession was the gift of Francis N. Johnston of about 2,000 Triassic fossils from the New Pass Mountains, Nev. Many types will result when the study of these fossils has been completed.

In the section of Cenozoic invertebrates, 11 lots of specimens were accessioned, aggregating 2,370 specimens, a considerable increase over last year's total. The most outstanding of these are as follows: A collection of about 50 types of Miocene Ostracoda from the Duplin marl of North Carolina, received from Richard A. Edwards; about 25 specimens (topotypes) of the foraminifer *Pseudophragmina (Proporoculina) peruviana* (Cushman), from northwestern Peru, received from Dr. Don L. Frizzell; holotype and paratypes of the foraminifer *Paranonion venezuelanum* Logue and Haas from the Upper Miocene of Venezuela, received from L. L. Logue and Merrill W. Haas; and about 1,000 specimens of Tertiary Foraminifera and Echinoidea from Camagüey Province, Cuba, received from Mrs. Dorothy K. Palmer. Paratypes of 31 species of Eocene Foraminifera from the Lodo formation of Fresno County, Calif., were obtained in exchange from Stanford University. The Pleistocene collections were enriched by the transfer from the U. S. Geological Survey of 230 fossil mollusks from New Mexico; 500 specimens from Golconda, Ill., gift of Charles Butts; and 506 land and fresh-water shells from Winona County, Minn., gift of Dr. S. C. Happ.

A large petrified conifer log from the Cretaceous formation near Berwyn, Md., was the gift of J. C. Stewart. This interesting fossil is now exhibited in its proper geological setting in the wildfowl exhibit of the National Zoological Park, where a résumé of the District of Columbia geology has been reproduced. Opalized wood specimens from Plumas County, Calif., gift of Mrs. Faye I. Cameron, and a section of a petrified tree trunk from James A. Tatum, were other accessions in paleobotany.

Vertebrate paleontology.—The outstanding accession of the year in this division was the collection resulting from the field expedition of the past summer in the Oligocene beds of Niobrara County, Wyo. The party secured a good representative series of the fauna, comprising some 236 lots in all. Specimens worthy of special mention are nearly complete articulated skeletons of the various mammals known as *Merycoidodon, Leptomeryx, Pseudocynodictis, Deinictis,*

and *Hoplophoneus*. Good series of skulls and partial skeletons of the fossil horse *Mesohippus*, the small camel *Poebrotherium*, the early rhinoceros *Hyracodon*, the squirrel *Ischromys*, and the rabbit *Palaeolagus* were also collected.

Through exchange with the Carnegie Museum a nearly complete skeleton of the primitive deer *Hypertragulus calcaratus* Cope was added to the collection. This specimen is being mounted for the exhibition series. A skull and lower jaws of the Miocene horse *Parahippus leonensis* and a right ramus of *P. blackbergi*, both from Florida, were received in exchange with the Museum of Comparative Zoölogy.

A fragmentary but unique reptilian specimen, consisting of 14 caudal vertebrae of a dinosaur, the first to be found in the Upper Cretaceous of Missouri, was obtained by purchase. The distal end of a femur of the sauropod dinosaur (*Pleurocoelus*), found in the Cretaceous Potomac gravels in the District of Columbia and transferred by the War Department, was interesting for its occurrence.

The collection of fossil birds was enriched by a small lot of bones, including the type of *Geochen rhuax* Wetmore, from Hawaii, received as a transfer from the United States Geological Survey.

One lot of 297 teeth of the pavement-toothed shark *Ptychodus mortoni*, from the Upper Cretaceous of Kansas, was received in exchange with George F. Sternberg.

The cetacean part of the collection was increased by some incomplete specimens from the Calvert, Miocene, of the Chesapeake Bay region, obtained from various sources.

INSTALLATION AND PRESERVATION OF THE COLLECTIONS

The completion of the necessary construction work in converting the western half of the physical-geology exhibition hall into three large alcoves allowed Associate Curator Henderson to proceed with exhibition work there. As a result the entire meteorite display has been reinstalled in the middle alcove, especially designed for the purpose. The cases are illuminated from within, and series of transparencies of photomicrographs are displayed to show details of structure in both the stone and iron meteorites. A large map on the wall shows the locations of the recorded falls and finds for meteorites within the United States.

Steady progress was made in the consolidation of the department's three large mineral study collections into a single series.

In the grinding and polishing laboratory, B. O. Reberholt prepared 708 thin sections of rocks and fossils, cut and polished 10 meteorites, and polished sections of 119 minerals, rocks, and ores, and 23 large specimens for the Geological Survey. The work for the Geological Survey was done upon request of their strategic mineral division which required the preparation of polished surfaces of their larger specimens because of their lack of facilities to do this work. In all cases this

material is either at present in our collections or will be transferred later.

Exhibition work in the invertebrate paleontology halls included, besides the usual servicing of the collections, the rearrangement of the case in the foyer to bring it up-to-date. In paleobotany, Dr. C. E. Resser condensed the exhibits so that one large case could be removed to provide space for the growing vertebrate exhibits.

Just before the close of last year Dr. Resser made molds of many Cambrian types from Vermont, eastern Canada, Wyoming, and Nevada contained in the Museum of Comparative Zoölogy, Peabody Museum, and Columbia University. About five weeks were required to cast these types and install them in the collections, and later six weeks were devoted to their photography and study so that they could be understood and coordinated with species from other beds of the same age.

Associate Curator Cooper replaced 150 three-inch drawers with the two-inch size, thereby gaining additional storage space for the ever-growing brachiopod collections. Most of the large collections of Pennsylvanian fossils from north-central Texas were cared for during the year. These collections, according to the usual practice in the division, were sorted into three groups, the first consisting of the choice specimens, which were placed in the biological collections, the second a representative stratigraphic lot, and the third numerous specimens for exchange. About two months were devoted to the preparation, arrangement, and partial study of the Devonian fossils collected in the Mississippi Valley. These yielded a small number of exceptionally fine biological specimens, but the bulk of the material remains in the stratigraphic series.

During the year the etching program, which has been a feature of Dr. Cooper's work for some years, was carried on rather slowly because of the difficulty in obtaining acid. In the latter part of the year, however, several carboys were used to good advantage, resulting in about six drawers of choice silicified material most of which was obtained from blocks of the Word limestone of Permian age. In order to care for this silicified material more safely, all specimens of these fragile fossils were moved into one room where adequate facilities have been made for housing them properly. While awaiting completion of arrangements for his Mexican trip, Dr. Cooper sorted and mounted the many delicate silicified trilobites from the Ordovician rocks of Virginia.

The head curator's work on the collections was as follows: Finding that portions of the graptolite collection had been misplaced in last year's transfer, he prepared and reduced the additional material so that the entire stratigraphic series is now contained in 120 standard drawers. A further condensation of collections was accomplished by picking Ostracoda, small corals, and Bryozoa from dredgings from the

Philippines, Gulf of Lower California, and Gulf of Mexico and segregating them in their proper places in the study series. He prepared about 30 drawers of shale fragments, representing ten Paleozoic formations and crowded with the microscopic fish teeth known as conodonts, and either identified or roughly classified the resulting specimens for future studies. Several six-foot tiers of Silurian fossils from England, Sweden, and the Mississippi Valley were greatly reduced by proper preparation and the resulting specimens assigned to biologic and stratigraphic sets. More than 650 thin sections of corals and Bryozoa, prepared with Mr. Reberholt's assistance, and the addition of many species determined from their study, record the work accomplished in these two divisions of the biologic series.

Lloyd G. Henbest continued the organization and general care of the Foraminifera collections. A new kind of storage tray developed from existing materials was found advantageous.

Curator C. W. Gilmore, in reporting for the division of vertebrate paleontology, states that mounting of the composite skeleton of the Permian reptile *Edaphosaurus boanerges*, mentioned in last year's report, was completed and the specimen installed in the exhibition series. The same can be said for the massive skeleton of *Uintatherium robustum*, a large primitive mammal.

Norman H. Boss, chief preparator, in addition to supervising preparatory work in the laboratory, has nearly completed mounting the small deerlike *Hypertragulus*. When not engaged in the articulation of skeletons for exhibition, Mr. Boss prepared numerous specimens from the 1942 collections and a number of delicate fossils from other sources. Preparators Thomas J. Horne and Arlton Murray were continuously employed in the preparation of various specimens, especially those of the 1942 summer's collection, with the result that more than one-half of this collection has now been prepared and placed in the study series.

Assignment to this division of exhibition space formerly occupied by the paleobotanical collections has permitted a limited rearrangement of the overcrowded east range. These changes, with the addition of several important skeletons, have resulted not only in a more logical arrangement of the specimens involved but also in a much improved appearance of the exhibition as a whole.

INVESTIGATION AND RESEARCH

The head curator completed a paper on the Siberian corals known as *Parafavosites*, for publication by the Journal of Paleontology, and another on the Ordovician cystids of Oklahoma now in press by the American Journal of Science. He was occupied for several weeks in reading proof on the "Bibliographic and Faunal Index of Paleozoic Pelmatozoan Echinoderms," published later in the year as Special Paper No. 45 of the Geological Society of America. Research work

on his monographic study of Lower Paleozoic corals proceeded in connection with upbuilding the collection of thin sections of fossil corals in general.

Dr. C. E. Resser reports further advance in several research projects. About three months were devoted to production of final manuscript on his Cambrian summary, following which nearly seven months were spent on the descriptions of Upper Cambrian trilobites, and finally several smaller papers were advanced toward completion. Dr. Cooper had to postpone certain other matters to concentrate on the study of the Illinois Devonian, a subject designed to perfect correlations of the Devonian in Illinois and elsewhere in the Mississippi Valley and also to identify Devonian subsurface strata as a part of the war program. After preparing the fossils and starting their study he was interrupted by the assignment to Mexico on another stratigraphic problem. Although most of his time in the office was spent on the Illinois work, some days were devoted to illustration of the Chazyan brachiopod monograph and to adding descriptions to the manuscript. Forty plates for this research were made, but it is estimated that six months more will be required for its completion.

Dr. T. Wayland Vaughan, associate in marine sediments, has carried on his studies on the Cenozoic faunas and corals. In joint authorship with Dr. John W. Wells, he published a volume of importance to all students, a résumé of post-Paleozoic coral genera, as Special Paper No. 44 of the Geological Society of America.

Curator Gilmore completed and submitted for publication a manuscript entitled "On the Osteology of *Testudo praeextans* Lambe, with Notes on Other Species of *Testudo*, all from the Oligocene of Wyoming." A short manuscript entitled "Notes on Two Newly Mounted Fossil Vertebrate Skeletons in the United States National Museum" was nearly finished and a beginning was made on a "Review of the Two Medicine Fauna, Upper Cretaceous of Montana." As time permitted, the type catalog was kept current.

As a result of the investigations in Mexico being conducted for the U. S. Geological Survey by Dr. W. F. Foshag, curator of mineralogy and petrology, there was published during the year a paper entitled "Tin Deposits of the Republic of Mexico," by Dr. Foshag and Carl Fries, Jr. (U. S. Geol. Surv. Prof. Pap. 935–C). This report includes five geologic maps of mines and placer areas and forms the third chapter of the series "Geologic Investigations in the American Republics."

E. P. Henderson, associate curator, has checked the meteorite literature, kept the records current, and also indexed the large file of photomicrograph negatives. He gave also some time to revising Dr. George P. Merrill's portion of "Minerals from the Earth and Sky" in the Smithsonian Scientific Series soon to appear in a new edition. Dr. Stuart H. Perry, associate in mineralogy, completed his

report on "The Metallography of Meteoric Iron," which is being published as a bulletin of the National Museum.

James H. Benn has under preparation a card index of all the minerals and their varieties now in the collections, a file that when completed will be of real service to the division. A card index of described and discredited minerals is under compilation from the literature. The completion of these two files will furnish a complete check list of all the minerals now in the collection as well as those still needed.

Members of the Geological Survey with offices in the Museum, who were not otherwise occupied with war duties, pursued their studies and research upon the collections throughout the year as usual. Dr. R. W. Brown completed and published two papers upon interesting fossil plants, one on a fossil grapevine occurring with the opal deposits in the Virgin Creek Valley of Nevada, and the other on a climbing fern. A field trip along the Paleocene-Eocene contact in Georgia, Alabama, and Mississippi made for the purpose of identifying the age of bauxite beds resulted in some excellent fossil plants new to the collections.

Studies of the Springer echinoderm collection proceeded during the year with Dr. Edwin Kirk specializing upon this work and the head curator occupied with the illustration and description of Ordovician crinoids and cystids whenever other duties permitted. Three publications by Dr. Kirk were issued, while manuscripts of three papers on the Upper Paleozoic Inadunata crinoids were completed.

Dr. Charles Butts spent the field season of 1942 in the northern end of the Valley of Virginia, where he prepared a detailed geologic map in the course of his studies. In the office he was occupied with the study of the fossils collected and the preparation of a volume on the subject. Dr. L. W. Stephenson spent some months on the study of the Lewisville fauna of the Upper Woodbine formation in continuation of his researches on the Cretaceous faunas of Texas. Dr. Ralph Imlay continued his studies of the Jurassic collections and centered his attention on the subsurface geology of the Gulf coast region in order to discover the eastward extent of the possible oilfields. He has nearly completed the correlation charts for the Jurassic of the Southern States and has in preparation two reports, one on the Cretaceous formations of the Greater Antilles, Central America, and Mexico and the other on the subsurface Lower Cretaceous Comanche rocks.

Most of the specialists in the study of the Cenozoic collections have been engaged in war duties the greater part of the year. Drs. Julia A. Gardner, C. Wythe Cooke, and W. P. Woodring were occupied with the collections during short intervals in their field operations.

There were 164 lots of material referred officially to the department for examination and report, these made up in some instances of large numbers of specimens requiring attention. The division of mineralogy

and petrology was responsible for 69 of these reports, and general geology for 74, while the remainder were assigned to the other divisions. Many inquiries were answered directly by members of the staff and numerous reports were made on specimens brought in person to the divisions.

In invertebrate paleontology assistance was given to the Tennessee Valley Authority, the U. S. Geological Survey, the Geological Survey of Illinois, Michigan State College, and the University of Chicago.

Curator Gilmore reports that the chief aid rendered to outsiders other than the loan of specimens has been the identification of materials sent in for determination. He has also cooperated with other Government bureaus in matters of opinion pertaining to paleontological matters.

Associate Curator Henderson spent some time with a committee preparing a classification and index list for natural, manufactured, and synthetic gem and ornamental stones, a cooperative task with the Bureau of Foreign and Domestic Commerce and the Tariff Commission. Several collections of minerals were prepared for foreign use, namely for the Instituto de Ciencias del Estado, Mexico; the Science Museum of the Institute of Jamaica; and the Seminario Conciliar Metropolitano, the National University and the Centro Cultural Paraguayo-Americano, all of Asunción, Paraguay. During the year 79 persons interviewed Mr. Henderson for the determination of gem stones.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Geological materials distributed during the year to various educational and research institutions and war agencies, as well as to individuals engaged upon scientific investigations, were as follows: Gifts, 874 specimens; exchanges, 121 specimens; and loans for study, 712 specimens. These include mineralogical and invertebrate and vertebrate paleontological specimens, but four mineral and rock collections sent as gifts to South American and Mexican institutions, through the Division of Cultural Relations of the Department of State, should be noted.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The estimated total number of specimens indicated below as assigned to the three divisions of the department is computed by adding to the figures of last year the number representing the difference between the number of specimens received and those sent out. The early estimates were approximate so that the present sums are likewise.

Mineralogy and petrology	256, 058
Invertebrate paleontology and paleobotany	2, 398, 120
Vertebrate paleontology	29, 430
Total	2, 683, 608

DEPARTMENT OF ENGINEERING AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

THOUGH the operation of the department under war conditions became more difficult as the year progressed, the general condition of the collections is good. The war has affected the work in a variety of ways. Although the total accessions recorded by the department were greater in number than in any one of the previous five years, one-fifth of them were increments to a war poster collection being assembled by the division of graphic arts. The engineering division experienced a drop in accessions as compared with the preceding year, due mainly to the absence of two experienced staff members, both serving with the armed forces. Again, the time consumed in research and furnishing information to war agencies, assistance in the training of war-agency personnel, and the department's experimental model construction contracts with war agencies curtailed the work planned for the improvement of the study collection.

The head curator, Carl W. Mitman, carried forward during the year several special assignments. One of these covered the work of directing the transportation and storage outside of Washington of about 120,000 pounds of the most valuable and irreplaceable specimens and materials in the Museum's collections. This task included also the organization of a 24-hour custodial service to guard and protect the stored material, which continues in charge of Mr. Mitman for the duration of the war. He directed also the work of the Smithsonian War Committee, of which he is chairman. This committee, charged with the coordination of Smithsonian activities toward the war effort held weekly meetings throughout the year. A statement of its work appears in the Report of the Secretary of the Smithsonian Institution.

In February 1943 Frank A. Taylor, curator of the division of engineering, was granted military furlough, was commissioned captain in the Army, and is serving with the Anti-aircraft Branch of the Coast Artillery. The loss of his stimulating leadership is felt keenly by the division. Until his return the head curator will endeavor to carry on Captain Taylor's duties. On August 1, 1942, Fred C. Reed, senior scientific aide of the division of engineering, was appointed to the position of associate curator, vice Lt. Paul E. Garber, now serving with the Bureau of Aeronautics of the Navy Department. Kenneth M. Perry at the same time was advanced from exhibits worker to senior scientific aide in this division. On December 1, 1942, Burlie Parks was transferred from the Museum property office to the position of exhibits worker formerly held by Mr. Perry. All these division staff appointments are for the duration of the war only.

On July 31, 1942, Dr. Wallace E. Duncan, assistant curator, section of chemical industries, resigned. The vacancy caused by his resignation was filled November 2, 1942, by the transfer of Joseph W. Schutz from the Social Security Board.

ACCESSIONS

Accessions for the year totaled 216, comprising 2,266 specimens. This is an increase of 34 accessions and a decrease of 149 specimens compared with the previous year. The accessions were distributed as follows: Engineering, 25 (438 specimens); crafts and industries, 74 (856 specimens); and graphic arts, 117 (972 specimens). Of these the following are worthy of special mention:

Engineering.—From the viewpoint of engineering history in the United States, the most interesting and valuable accession was an original truss of an iron railroad bridge designed, constructed, and erected by the Reading Railroad Co. in 1845. The specimen, approximately 34 feet long, is the only remaining part of the first iron-truss, double-track railroad bridge built in America, which is also believed to be the first iron-truss bridge erected in the United States. The bridge spanned a small stream and highway near Manayunk, Pa., and continued in service until 1901. The truss is a combination of cast and wrought iron, the compression members being of cast iron, and all tension members of hand-forged wrought iron. It was presented by the Reading Co.

Early in the war there was instituted as part of the training program of our armed forces the use of sets of accurately made scale models of the types of airplanes used by the United Nations and the Axis, for the purpose of teaching recognition at sight of both friend and enemy. Lt. Paul E. Garber, formerly of this division, was actively engaged in the development of this program, and through him the Museum was fortunate in receiving two groups of these models for addition to the aircraft collection. One set of 39 all-metal models was presented by the Bronzart Metals Co., and a second series of 82 plastic models, distributed throughout the Navy and used in training for recognition, range estimation, and gunnery practice, was presented by the Cruver Manufacturing Co.

Toward the close of the first World War, aircraft-propeller manufacturers turned their attention to the manufacture of all-metal propellers in substitution for wooden propellers then in use. The late Dr. S. Albert Reed was active in this work and in due time invented an aluminum-alloy propeller that today is recognized as one of the early successful types. This first full-size model, known as the D–1, now forms part of the Museum's extensive propeller collection, having been bequeathed to the Museum by Dr. Reed.

Of current interest is the accession from the Standard Oil Co. of New Jersey of a scale model of the Bayway Unit Polymer Plant for producing high-grade motor fuel and aviation-gasoline blending stock.

Die casting today is one of America's great industries, following many years of intensive research and experiment. One of the pioneers in this field was H. H. Franklin, maker of the Franklin air-cooled automobile, who personally presented four die castings made by him in his plant at Syracuse, N. Y., before 1900. The specimens constitute excellent examples of the early attempts to produce finished castings in metal dies.

For many years the section of mineral technology of this division has contained educational exhibits on abrasives, one of which was that of the Norton Co. During the year this company modernized the entire exhibit, making an entirely new installation of 178 specimens. The exhibit includes grinding wheels, sharpening stones, laboratory apparatus, specimens of work accomplished, and colored transparencies of grinding machine operations of many sorts. The exhibit is highly interesting and instructive and has been frequently studied by the personnel of war agencies.

Crafts and industries.—Additions to the collections of this division totaled 856 new specimens, which were distributed as follows: Textiles, 210; woods and wood technology, 84; chemical industries, 214; medicine and public health, 473. Several of the accessions deserve special comment:

In connection with gifts of previous years the Cotton-Textile Institute presented specimens of American cotton fabrics selected by a committee of experts as the most representative materials for the spring and summer seasons of 1943. William Skinner & Sons gave a cap ribbon of a new type adopted by the U. S. Navy, in which letters in gold leaf are fused into a cut ribbon of acetate rayon, instead of the silk ribbon embroidered with gold thread formerly used; the American Viscose Corporation contributed a large panel illustrating the manufacture of rayon from wood and cotton by the viscose, cuprammonium, and acetate processes, and specimens of viscose rayon fabrics woven from filament and spun yarns; and the American Bemberg Corporation added to its former gifts skeins and cones of cuprammonium rayon yarn and fabrics woven with this yarn alone and in combinations with silk, spun silk, spun rayon, viscose rayon, and cotton. The Singer Sewing Machine Co. added to its contributions, begun in 1897, a new surgical stitching instrument complete with extra needles and case and a felt sampler showing numerous types of surgical suturing.

To the exhibits of wartime parachute fabrics there were added specimens of Nylon and cotton woven webbings used for the harness connecting the aviator to his parachute, a gift of the Phoenix Trim-

ming Co. Dr. H. L. Shantz contributed fine specimens of bark cloth, and a mat and bags woven from the fiber obtained from the leaves of a species of *Raphia*, which were collected by him in East Africa and the Belgian Congo in 1920. One of the specimens of bark cloth is remarkable in size, being 8 feet wide and 22 feet long. Pieces of the bark cloth are used as wiping cloths or waste by locomotive engineers in the Belgian Congo, while the larger raffia bags are used for transporting kernels of the oil palm.

The collection of old-time needlework and textile handicrafts was increased by six gifts. Samplers were presented by Miss Florence W. Layton, Mrs. M. S. Eakin, and Mrs. Marion J. McLean. Miss Mary E. Johnston presented an all-white, homespun, embroidered, cotton counterpane dated 1822; Mrs. E. G. McFadden, a bordered, cotton applique quilt, made by her great-grandmother at Charleston, S. C., in the early 1800's; and Mrs. Hannah Field Vosper, one length of a single-width homespun carpeting, hand-woven in a stripe pattern using tie-dyed wool warp and cotton weft.

New specimens from 17 contributors were received for an exhibit of alternates and substitutes arranged by the section of chemical industries. This exhibit is of particular interest at this time since it is made up of various materials and techniques developed recently to cope with shortages of war materials. Many of the substitutes will find extremely useful peacetime application later, for often they are better than the substances they were developed to replace.

The most valuable pharmacy additions were as follows: Medicines for glandular diseases; a collection of surgical sutures; a series of specimens which depicts how typhus vaccine is made and used; early American medicine bottles; and a sugar analysis outfit. Historical objects of importance received during the year include the following: A model illustrating chemical transitional steps in the original American synthesis of vitamin B_1; old medical and pharmaceutical relics; contact eyeglasses in plastic, glass, and a combination of plastic and glass; and the latest American medical standards. The public health additions were a collection of food models arranged to show the daily food requirement; dangerous disease and vital statistics placards; glass statistical charts pertaining to cancer; food value charts; and specimens of North American and South American lypholized anti-snake-bite serum. The section of materia medica received crude drugs and pharmaceuticals to replenish those used for study and tests.

Important additions to the wood collection included 20 microscopic mounts of specimens of woods belonging to the genus *Casearia*, prepared from authentic wood specimens in the Museum's collection that had been sent to the Department of Botany, University of Toronto, where they were prepared by, or under the direction of, Dr.

M. W. Bannon. J. L. Stearns presented an attractive set of 20 common woods indigenous to South Africa. This region produces a number of truly fine timbers, samples of which are included in the set. The Bureau of Ships, Navy Department, transferred to the Museum 13 samples of tropical American woods that they had received for testing in some phase of their wartime shipbuilding program.

Graphic arts.—An unprecedented total of 117 accessions, surpassing that of any previous year, was received by this division. Of these, 82 (859 specimens) were assigned to the graphic-arts section and 35 (115 specimens) to the section of photography.

A collection of 651 war posters from Government agencies and private industries, still in the process of growth, constitutes a valuable addition to the pictorial and historical record of our participation in the war. Many were designed by outstanding American artists in both the fine art and commercial fields, a fact that enhances their purely historical value. Three Russian posters, the gift of Dr. Aleš Hrdlička, are interesting examples of the hand-stenciled method utilized by artists in territories where printing facilities may be limited. Russian guerrilla artists produce posters by this method. Another gift from Dr. Hrdlička was a set of 40 cartoons by Russian artists, all anti-Nazi lampoons published in offset lithography by VOKS, the Soviet organization for promoting cultural relations with foreign countries. One of the handsomest gifts of the year consists of 11 drypoints of figure studies presented by George T. Tobin, a professional illustrator who began working in drypoint in 1931. His work is characterized by a delicacy and suavity most unusual in the drypoint medium. Fourteen wood engravings and a bookplate (wood engraving) by the late James Bann, with a photographic enlargement of one print to illustrate the wood-engraving technique, were received as a gift from Miss Helen Bann. The technique of Mr. Bann was very simple and clear-cut, and provides a clear explanation of this method of printmaking.

One of the most deceptive of art objects is the transfer print, which, to the untutored eye, appears to be a miniature painting on glass. One of these prints, a portrait of Maj. Gen. Zachary Taylor, was given to the division by Miss Esther Karst, of the John Karst Museum. In this process, popular about 125 years ago, a small engraving or etching was securely attached with a varnish face downward to a piece of glass. When the varnish was thoroughly dry, the paper was rubbed away from the back of the print, leaving the lines of the engraving on the glass. The next step was to apply oil colors over the engraved lines. The final result is viewed from the unpainted side of the glass. This process is not to be confused with direct painting on the back of glass, another method that was practiced extensively. A fine mezzotint, "Thunderhead Crest," was presented by the artist,

Reynold H. Widener. An interesting feature of this print is the fact that the plate was prepared in the manner of the early mezzotints, by using the roulette wheel to roughen the plate rather than the more modern rocker. Mezzotint requires a plate systematically roughened and pitted, so that, if inked, the plate would print as a solid black. By scraping away the ink-holding pits so that the amount of printing ink is dependent upon the depth of the pits, it is possible to obtain the subtlest gradations of tone from black to white. Once a very popular method of printmaking, particularly in England, this process is seldom used at the present time, although fine results are obtainable.

Among other accessions of interest are "Back to Earth," an etching by George H. Wright, the associate members' print of the Society of American Etchers; a lithograph made in 1835 by Fra Pagliusto after a self-portrait by Bartolomeo Pinelli, the gift of Miss Josepha Whitney; and a photomechanical reproduction in offset lithography of a water color, "Charles Street Meeting House," by Dwight C. Shepler. This print, made in seven colors, is a remarkable example of printing that resembles a water color so closely that only a trained eye can detect the fact that it is a print. This reproduction is the gift of the American Writing Paper Corporation.

The most important accession received by the section of photography was a Woodward Solar Camera secured from Miss Edna Billings. No other is known to exist, and this one came to light largely as a result of the nation-wide drive for scrap metal. This type of camera was manufactured in Baltimore, Md., under patents dated between 1857 and 1877, and was the very first means available to commercial photographers during the latter half of the nineteenth century for making photographic enlargements on the then slow bromide paper, using the sun as a source of illumination. Enlargements so made were known as solar prints.

Another noteworthy accession was a collection of 26 pieces of photographic equipment presented by A. C. Stebbins. The material came from the studio of his brother, the late A. B. Stebbins, and includes a tintype camera with four lenses, plate holders dating from 1881, the time of the general introduction of the dry plate, and an apothecary's scale used to weigh photographic chemicals. Of historical importance was the construction of a Cassegrain camera in the Museum's shop from drawings by Dr. A. J. Olmsted, from parts received as a gift from Henry G. Fitz. This type of camera was used experimentally in the early daguerreotype days, but, as the image was small, it was never popular. The design was that of the reflecting telescope built by Cassegrain, an early French astronomer. Ransom Matthews presented 11 pieces of historical motion-picture film from the Earl Thiesen collection, and 10 hand-made lantern slides in color of 1860, were the

gift of Keith and Dione Brady. Forty-four pictorial photographs were added to the permanent collection. These include eight dog portraits by Arthur S. Mawhinney, one of the country's outstanding dog photographers. His "Champions on Parade," as his pictures are called, represent a prize winner of each breed. Frank R. Fraprie, owner and editor of *American Photography*, presented eight pictorial photographs from his collection, all splendid examples of his work, and Will Towles, the well-known teacher and demonstrator of photography, gave the section 10 portraits representative of his work over the past 20 years. The marine photographer John R. Hogan presented six prints in his particular style, and Mrs. Patricia MacDonald Tutchings donated seven framed portraits made by her celebrated father, the late Pirie MacDonald. The portraits are of Joseph Pennell, Theodore Roosevelt, Frederick W. MacMonnies, John Masefield, Elihu Root, Roald Amundsen, and a self-portrait of Pirie MacDonald.

INSTALLATION AND PRESERVATION OF COLLECTIONS

The major task accomplished on the care of the collections was the rearrangement and reinstallation following the evacuation of irreplaceable materials. From the present appearance of the exhibition halls the average visitor is not aware that 130 boxes and crates containing approximately 2,000 specimens have been removed, the majority of which had been on exhibition. A second major activity was the installation of new accessions, the removal of obsolete educational exhibits, and the rearrangement and classification of stored collections in modern fireproof storage cases. The more important work in these various categories accomplished by the several divisions and sections is here described:

Engineering.—The early part of the year was devoted to packing the heavier and bulkier engineering specimens marked for evacuation. The great variety of materials and the great differences in their size and weight made the task a difficult one, the specimens ranging from a unique watch movement to a full-sized airplane. The boxes and crates when packed were stored by necessity in the exhibition halls until removed from Washington, and when they had been shipped much work was required to rearrange and reinstall the collections remaining. Work on improving the arrangement of collections in the Aircraft Building undertaken the previous year continued. Some of the propellers in the large propeller collection were reinstalled, but there are still many not placed because of the impossibility of obtaining suitable metal fittings. In the section of mineral technology there have been on display for 25 or more years educational exhibits pertaining to the technology of certain mineral industries, particularly lime, cement plaster, and coal. While these constituted accurate expositions of the technology in vogue at the time of their accession,

technologic changes since then have made these exhibits obsolete. The large models pertaining to the lime and cement plaster industries were therefore removed from exhibition. For a similar reason the large coal-mine model, which for the past 30 years has occupied the central portion of the coal court, was also dismantled. The model had been constructed originally for exhibition at the Louisiana Purchase Exposition, St. Louis, Mo., in 1904.

Crafts and industries.—Thirteen new installations and 25 reinstallations and rearrangements of the textile collections were carried out during the year. Most of the reinstallations came as a result of the removal of all irreplaceable materials to safe quarters outside of Washington. On the galleries devoted to chemical industries, five new installations and four new rearrangements were made, and three exhibits were removed and stored. Four of the new installations were of newly acquired material relating directly to the war effort. In the division of medicine and public health, the principal installation was the placing of a gigantic chemical equation showing the steps in the synthetic manufacture of vitamin B_1. The exhibit is about 20 feet long and 5 feet high, with the center portion illuminated. Other installations were those illustrating the location, appearance, and functions of endocrine glands and the manufacture of vaccines. In the public-health section new exhibits were installed relating to the part diet plays in the maintenance of health.

Throughout this division deteriorated specimens were replaced by new ones, or if this could not be done, they were retired to storage for possible future reference. There was periodic examination and fumigation of perishable materials and many new labels were prepared.

Graphic arts.—The most important activity in this division was the completion of the entrance hall to the graphic-arts exhibitions, formerly a dark, confusing, and unsightly corridor unsuitable for exhibition purposes. It is planned to use the area for the special monthly exhibitions arranged annually by this division. In all other respects the major work on the collections had to do with the improvement of exhibition technique.

Special exhibitions.—In addition to these various activities, special exhibitions were prepared or arranged as follows:

Engineering

Two special exhibitions pertaining to engineering were held during the year. During the month of January, the Washington Ship Model Society held its annual exhibition in the boat hall in the Arts and Industries Building. The display was widely attended and attracted considerable attention. In April, the Metropolitan Society of Model Engineers held its annual exhibition of model railways. This was installed in the east hall of the Arts and Industries Building and continued for a month.

Crafts and Industries

A special exhibit was prepared in celebration of Pan American Day, April 14, to show specimens of the principal exports of the republics comprised in the Pan American Union. This is to be continued on exhibition indefinitely in the south hall of the Arts and Industries Building.

Graphic Arts

Ten monthly special exhibitions were held in the foyer of the Natural History Building and two in the Smithsonian Building, as follows:

NATURAL HISTORY BUILDING

July 15–August 30: "Prints by 24 Masters," selected from the collection of the division of graphic arts.
September: Prints by "Pop" Hart, selected from the collection of the division of graphic arts.
October: 37 pencil drawings by Mrs. Beatrice Field, of Winchester, Mass.
November: 35 wood cuts and linoleum cuts by Norman Kent, of Geneva, N. Y.
December: 35 etchings by Ralph Fabri, of New York, N. Y.
January: Color prints by the American Color Print Society.
February: 18 lithographs by Peter Hurd, of San Patricio, N. Mex.
March: 27 etchings and 7 pen drawings by Mrs. Helen Miller, of New York, N. Y.
April: 35 etchings by James McBey, of New York, N. Y.
May: 12 drypoints and 20 wax-pencil drawings by George T. Tobin, of New Rochelle, N. Y.

SMITHSONIAN BUILDING

May: 40 anti-Nazi cartoons in offset lithography by Russian artists.
June: 35 prints by the National Association of Women Artists, Inc., of New York, N. Y.

Photography

Fifteen special photographic exhibitions were held, twelve in the Arts and Industries Building and three in the foyer of the Natural History Building:

ARTS AND INDUSTRIES BUILDING

July: 70 prints by Gustav Anderson, of Amityville, N. Y.
August: 60 prints by the Revenue Camera Club, of Washington, D. C.
September: 30 prints by Alajos Schuszler, of Arlington, Va.
October: 50 prints by Axel Bahnsen, of Yellow Springs, Ohio.
November: 60 prints by John R. Hogan, of Ardmore, Pa.
December: 54 prints by the Camera Club, of New York, N. Y.
January: 100 prints from the Metropolitan Camera Club Council, of Rockville Center, N. Y.
February: 74 prints from the American Photographic Publishing Co., of Boston, Mass. These prints are the originals from which the illustrations in the "American Annual" are made.
March: 66 prints from the Telephone Camera Club of Manhattan, New York, N. Y.
April: 60 prints by the late Thomas O. Scheckell, of East Orange, N. J.
May: 99 prints from "Popular Photography," Chicago, Ill.
June: 61 prints by Edward F. Raynolds, of Central Valley, N. Y.

NATURAL HISTORY BUILDING

March: 204 prints from the Potomac Appalachian Trail Club, of Washington, D. C.
April: 31 prints "Our Navy in Action" from the Office of Public Relations, Navy Department, Washington, D. C.
May: 113 prints, Arlington Camera Club, of Arlington, Va.

INVESTIGATION AND RESEARCH

Investigation or research by the staff was largely that required to furnish information to correspondents and to students calling on staff members, or the identification of materials submitted to the Museum by private individuals and Government bureaus. As time permitted, individual staff members pursued their continuing studies in specific fields of industrial and engineering history.

Hardly a day passed during the year that assistance was not rendered by a member of the staff to outside investigators through the use of Museum material. In engineering this was largely in the transportation field and was especially voluminous in aeronautics. In crafts and industries, assistance ranged from furnishing drawings and advice on the adaptation of common and automatic loom shuttles to a military device, to the furnishing of wood specimens and drugs for wartime studies.

Assistance rendered other Government bureaus was considerably greater in volume than in the previous year. The majority of requests for aid originated with war agencies and covered practically every field of engineering and industry with which the staff is competent to deal. For example, the rubber-plant investigation project of the Agricultural Research Administration of the Department of Agriculture was aided by a detailed study of cross sections of "chilte" trees from Mexico. For the Quartermaster Corps, Marine Design and Construction Division, studies were conducted on the suitability of loblolly pine for Army boat construction. Again, special courses of instruction on the identification of the various methods of printing were prepared and given to classes of document inspectors, Federal Bureau of Investigation, Department of Justice. Positive identification was made for this bureau of the source of rotogravure printing of an Axis propaganda pamphlet. For the purpose of furthering cooperation with the Latin American republics, the department rendered specific aid to the Board of Economic Warfare and to the Coordinator of Inter-American Affairs, both in the field of handcrafts and handcraft tools and in steam automobile design.

The information given to private correspondents and visitors ranged from advice on the growing of medicinal herbs and the preservation of leather objects to the demonstration of rubber synthesis. It is estimated that the department gave attention to 1,000 requests of this nature during the year.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Materials distributed from the department included specimens, photographs, and prints totaling over 4,000 items. The great majority of these were the specimens composing seven traveling exhibits relating to the graphic arts that were on circuit throughout the year and were lent for display 43 times. Specific loans of 502 items were made to educational institutions for exhibitions, demonstrations, and experimental purposes; 98 specimens of wood were exchanged with forestry schools and students of woods; 22 photographic specimens were exchanged for equally valuable specimens; and 9 specimens were given war agencies for investigation and experiment. During the year, too, 196 copies of drawings and photographs of the Historic American Merchant Marine Survey, preserved in the division of engineering, were made and distributed to private purchasers. This brings the total of such material distributed since the completion of the survey in 1938 to 3,522 copies.

NUMBER OF SPECIMENS UNDER DEPARTMENT

Engineering	17,425
Textiles	15,802
Woods and wood technology	13,034
Chemical industries	22,938
Agricultural industries, including foods	2,239
Medicine and public health	19,815
Graphic arts, including photography	46,876
Total	138,129

DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

THE past year in the division of history was a very active one. Among the many projects that have engaged the attention of the members of the staff are: The reinstallation of the exhibits in the north and west halls; a review of the status of the storage collections; the installation of a special collection of firearms, swords, and daggers presented by Ralph G. Packard; the installation of a special exhibition of firearms in the Natural History Building; the cataloging of a special collection of coins and medals presented by the Honorable Frederic A. Delano; and the packing of especially valuable material for protection from possible air raids.

The division lost, by transfer to another Government Department, the services of Miss Bertha L. Ferguson, clerk-stenographer, who for 15 years faithfully performed not only the routine clerical tasks of the division, but also many duties not usually associated with a purely clerical assignment. The position made vacant by Miss Ferguson's transfer was filled by the appointment of Miss Virginia Galt.

ACCESSIONS

The number of accessions received was 46, which aggregated 1,903 specimens. In addition, there are included 11,899 specimens that had been in the collections for some years but had never been formally accessioned. These appear for the first time in the total given at the end of this report.

The three most important accessions of the year were in the fields of art, arms, and numismatics. The first of these, received by bequest, consisted of only five specimens, but they were of unusual interest not only because of their artistic and historical value but also because they completed the collection of paintings by J. L. G. Ferris, of Philadelphia, 71 of which were presented by Mrs. Ferris in 1932, 2 years after her husband's death. These five paintings are: "San Salvador," representing the first landing of Columbus in the New World in 1492; "The Knight of the Double Cross," depicting the ships of Henry Morgan on the high seas in 1671; "Here Comes the Bride," illustrating the marriage of Martha Custis and George Washington in 1759; "Mount Vernon and Peace," a portrayal of General and Mrs. Washington at home with guests in 1784; and "Painter and President," representing General Washington sitting for a portrait by Gilbert Stuart in 1795.

The finest accession of firearms, swords, and daggers received by the National Museum in recent years came as a gift from Ralph G.

Packard, of Morristown, N. J. The collection illustrates the evolution of firearms from the matchlock to the automatic of the present day and includes all the methods of ignition used during the past 350 years. The history of the sword and dagger is also well represented, among the edged weapons included being several knights' battle swords, Spanish, Italian, German, Scottish, and Swiss swords and rapiers of the fifteenth, sixteenth, and seventeenth centuries, and Scottish broadswords of the seventeenth and eighteenth centuries. Also in the collection are two fine sixteenth-century German crossbows. The firearms collection, beginning with the matchlock type, includes an elaborately inlaid Italian piece of the sixteenth century and a German wall piece dated 1612, likewise beautifully inlaid. Wheel locks, some of which are exceptionally fine, include a seventeenth-century light wheel-lock saddle gun of blunderbuss type, with saddle hook, probably of French origin. An American colonial matchlock has the name "Newtowne" burned on both sides of the stock. This piece can be dated definitely prior to 1636, as the name of Newtowne was changed to Cambridge in 1636, with the founding of Harvard College. There is a very fine specimen of the Snaphaunce type, while the flintlocks include both single- and double-barreled varieties, and an early Brown Bess, the regulation musket of the British services during the early eighteenth century. Among the many rifles and muskets are Kentucky single-barreled rifles and the double-barreled type known as "over and under"; a Committee-of-Safety musket of 1775–1776; a Charleville musket of 1763, illustrating the pattern from which the first United States muskets were made; the first type of United States pattern musket; a British rampart or boat gun; a 4-barreled American carbine, with the barrels turned by hand; a breech-loading flintlock rifle by Warsop, a forerunner of the Ferguson rifle; a breech-loading rifle designed by Maj. Patrick Ferguson used in the American Revolution by the British; a smooth-bore flintlock repeating gun of the Cookson type; a Forsythe rifle, one of the original Forsythe patents, having an interchangeable smooth-bore barrel. Among the pistols are wheel locks of the seventeenth century by Lazarino Cominazzo and representative pistols of German, Italian, Spanish, Dutch, and Portuguese origin. Sporting pieces are represented by a breech-loading smooth-bore piece akin to the Ferguson rifle and one of Spanish origin similar to the Forsythe. Included in the collection are many other fine pistols, rifles, and revolvers, ranging through the matchlock, wheel lock, flintlock, and percussion pieces to the Colt automatic. The four finest rifles in the collection were made under the supervision of Mr. Packard, who has used them in hunting game, both big and small, in many parts of the world. One of these rifles is equipped with telescopic sight and another with a specially designated thumb trigger. In addition to

the great collection of arms, Mr. Packard presented more than 300 publications, many of them old and rare, on the history of arms, armor, and firearms.

The accession of most importance to the numismatic collection was the large collection of coins, medals, medalets, and tokens presented by the Honorable Frederic A. Delano, of Washington, D. C., a Regent of the Smithsonian Institution. Of particular interest among the coins were several examples of the Graeco-Roman or Imperial Greek coins struck in western Asia and northern Africa at the time of the political domination of these territories by the Romans, from the first to the third centuries A. D., and examples of Roman coins, and of silver denarii, struck during the last two centuries of the Roman Republic. Representative of the Roman Empire are bronze coins struck during the period from Augustus to Honorius, 27 B. C. to A. D. 423; likewise portrait coins of the various Roman emperors and bronze coins of the Byzantine Empire struck during the period A. D. 490 to 640. Modern European coins include specimens struck between 1660 and 1900 for circulation in Austria, Belgium, Denmark, France, Germany, Greece, Great Britain, Italy, the Netherlands, Portugal, Russia, Spain, and Switzerland; also included are interesting coins of Argentina, Brazil, Chile, China, Colombia, Egypt, Japan, Mexico, Peru, Venezuela, and the United States.

Most of the medals in the collection originated in France or the United States and may be divided into three groups: Art, historical, and portrait medals. While the French art medals were struck largely during the period of World War I, the subjects included are not all martial in character, those of religious and artistic interest being also well represented. The art medals of the United States have as subjects not only art, but history, valor, and civics as well. French medals in the series of historical significance range from the Capture of Besançon in 1674 to the Signing of the Armistice in 1918. Portrait medals depict personages of importance not only to France, but to the United States. These include two of Benjamin Franklin, one by Godel and one by Dupres. Historical medals and medallions of the United States series range from the Founding of Norwalk, Conn., in 1649 to the Tercentennial Anniversary of the Landing of the Pilgrims in 1920. United States tokens includes series struck during the Civil War and during World War I.

The collection of mementos of famous personages was increased by the accession of a diamond and platinum bracelet that was presented by Elizabeth, Queen of the Belgians, to Mrs. Brand Whitlock, the wife of the United States Ambassador to Belgium during World War I. This bequest will be installed with the large collection of associated objects presented by Mrs. Whitlock in 1936.

The stamp collection was increased during the year by the addition of 826 specimens, transferred from the Post Office Department. Of special interest were stamps of Great Britain overprinted "M. E. F." (Middle East Force) for use in the former Italian territory of Eritrea, and recent issues of the Bahamas, Ceylon, Cyprus, Gibraltar, Malta, Newfoundland, Nyasaland, and Tonga; stamps issued by the Norwegian Government in London (used on letters carried by Norwegian warships and merchant vessels), and by the exiled Jugoslavian Government in England; and recent issues of the Soviet Union.

INSTALLATION AND PRESERVATION OF COLLECTIONS

The division was represented in two temporary exhibitions of unusual interest and importance during the year.

The small portable writing desk on which Thomas Jefferson wrote the first draft of the Declaration of Independence was lent by special arrangement to the Library of Congress in April for exhibition during the celebration of the two-hundredth anniversary of the birth of Jefferson. A small reproduction of a United States flag of the period of the Revolution was lent for exhibition with the writing desk. This material was returned to the custody of the Museum at the close of the celebration.

Under the auspices of the department of anthropology an exhibition of historical firearms was arranged by Capt. Charles Carey, assistant curator of the division, and shown in the foyer of the Natural History Building from August to October 1942. Its purpose was the delineation of major changes that have taken place in firearms during the past three centuries. For comparison, a model of the 1800 United States military musket was shown beside a Garand M1 rifle, a current weapon of our fighting forces. A double-barreled flintlock fowling piece of the era of the American Revolution and the War of 1812 was placed in juxtaposition with an auto-loading shotgun of the present day. The evolution of the rifle and revolver was illustrated by numerous specimens ranging from the Brown Bess of the British Army in the American Revolution, through the military and machine rifles and machine guns of World War I, to the automatic pistols of the present day. Several cases of modern sporting arms were displayed, as well as handsome scale models of the 14-inch naval guns used by the United States Navy ashore in France during World War I, a model of the 7-inch field gun used by the United States Marines in France during that period, and 12 scale models of tanks and armored vehicles used by the German Army in the present war. In addition to the firearms mentioned, the exhibit included original patent models of certain inventions that proved to be more ingenious than practicable. Likewise furnished by the division for this exhibit were a related series of oil paintings illustrating the historical development of the United

States flag and a series of United States Army swords indicative of the historical development of the swords of this type made during the period 1776 to 1925.

Satisfactory progress was made during the year on the installation of the permanent exhibition series. For the past several years the staff has been building up in each of the division's exhibition halls a series of exhibits relating to one or two phases of the work of the division, rather than to miscellaneous subjects. As a result of such specialization, arms, costumes, naval equipment, military equipment, and numismatics each has its separate hall. The latest space to be so assigned was the west hall, where progress was made during the year in the installation of civil mementos. Four large floor cases contain mementos of the careers of the four secretaries of the Smithsonian Institution who guided its destiny during the period 1846 to 1927. Exhibited in this hall also are collections of china, glassware, silverware, and furniture, much of which was owned by leading American statesmen, including George Washington, Thomas Jefferson, Alexander Hamilton, and Henry Clay. Other materials in this hall have no personal significance but are of public interest from the standpoint of the development of the American home. The remaining space will be occupied by cases containing mementos of the lives and careers of other distinguished American citizens. In order to make space for the changes in the west hall, it was necessary to remove the entire series of military exhibits, most of which were reinstalled on the east side of the navy court. Certain of the civil exhibits were moved from the north hall to the wall cases on the north side of the navy court. This is a temporary arrangement that will be changed as soon as the wall cases on the south side of the hall have been renovated.

An improvement was made in the numismatic exhibition series during the year by the arrangement of the Moritz Wormser Memorial Collection, lent by the American Numismatic Association, in three cases in a corner of the coin and medal hall. A typical series of Greek and Roman coins was also installed in this hall. Improvement in the arrangement of medals was accomplished by the installation in the center of the hall of seven table cases containing a series of American medals representing the entire period of American numismatic history. Various phases of American history are now illustrated by medals, including Army and Navy medals, national and local medals of award, commemorative medals, Indian peace medals, and Presidential and portrait medals.

Except for the most recent issues received, the cataloging of postage stamps was practically up to date at the close of the year. The exhibition series has been kept current and the study series made readily accessible to philatelists and collectors desiring to see them.

Closely related in importance to the preservation of the collections are the careful preparation, the arrangement, and the preservation of the records. A specific piece of work begun by the curator during the year in this field was the preparation of an itemized classified list of the 765 specimens in the Frederic A. Delano collection of coins, medals, medalets, and tokens. Another accomplishment, important to both the installation and the preservation of the collection, was that performed by Capt. Charles Carey in connection with the Ralph G. Packard collection of firearms, swords, and daggers. This fine collection has been listed and installed in the arms court in historical sequence and fully labeled in such a manner that the public can readily interpret the scientific and historical value of the collection. Work begun several years ago in arranging the records of the historical collections to render them of the greatest possible value was continued.

INVESTIGATION AND RESEARCH

During the past year the members of the staff continued their researches in connection with the history of arms, coins, flags, and stamps.

Forty-five lots of material were submitted by outside agencies and individuals for identification. The most important of these was a collection of about 300 coins and tokens from the Nevada State Museum and Art Institute.

Information concerning the designs and legends on continental and State paper currency used during the period of the American Revolution was given to a representative of the Office of Price Administration, to assist him in research on the depreciation in the value of this currency during the period mentioned.

Considerable time was given to investigation and research in cooperating with agencies contributing to the war. The War Department, in connection with the production of a new series of medals and decorations to be awarded for distinguished military service, appointed two artists to make a study of the Museum's exhibition and storage series of military medals and decorations of the United States and foreign countries. The division's military section, under the direction of Captain Carey, has repeatedly assisted various branches of the War Department in connection with military processes of definite scientific and technical importance in the fields of arms, ordnance, and military costumes. An achievement in the stimulation of public interest in the war was the preparation under the supervision of Captain Carey of a series of drawings of military and naval uniforms worn by women of the United States during World War I, for publication in a popular weekly magazine. The drawings were made from original uniforms in the collection acquired from the National Society of the Colonial Dames of America subsequent to World War I.

A contribution made to the progress of the war, although not within the realm of investigation and research, was the donation of a series of surplus German heavy-artillery weapons to the War Department to be scrapped and used for making steel for military use. These guns were captured by the American Expeditionary Forces during World War I and for more than two decades were on exhibition in the Smithsonian Park, under the auspices of the division of history in what was planned as temporary exhibition. Their usefulness for this purpose being at an end, it was calculated that approximately 100 tons of steel would be obtained from these weapons. It may be added that suitable examples of cannons of historic importance have been retained in our permanent collections.

NUMBER OF SPECIMENS UNDER DIVISION

Art	1,592
Civil	16,216
Naval	2,228
Military	27,006
Numismatic	50,600
Pictorial	16,747
Philatelic	410,656
Total	525,045

ACCESSIONS DURING THE FISCAL YEAR 1942–43

(Except when otherwise indicated, the specimens were presented, or were transferred, in accordance with law, by Bureaus of the Government)

ABBOT, Dr. CHARLES G. (See under William H. Blackburne.)

ABBOTT FUND, W. L., Smithsonian Institution: 593 bird skins, 14 bird skeletons, mammals, and reptiles collected by Walter A. Weber, 1943, Tabasco Expedition (165267).

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, Philadelphia, Pa.: 27 mammals collected by Fred Ulmer (George Vanderbilt Sumatran Expedition) on Sumatra and Nias in 1939 (154388); (through Dr. H. A. Pilsbry) 6 Cuban urocoptids, representing paratypes of 2 species (163355); (through J. A. G. Rehn) 33 insects, representing 8 species, including 3 paratypes of 3 species (164725).

AGELASTO, M. A., Virginia Beach, Va.: 1 stomatopod (165035).

AGRICULTURE, U. S. DEPARTMENT OF:

Bureau of Animal Industry: (Through Dr. Wendell H. Krull) 1,592 land and fresh-water shells from Utah, Idaho, and Wyoming (163135).

Bureau of Entomology and Plant Quarantine: 1 amphipod, 73 isopods, and 6 mollusks (163593, 163999, 164127, 165050, 165203); (through M. C. Lane) 100 beetle larvae (wireworms), representing 12 species (163794); (through C. F. W. Muesebeck) 46,000 miscellaneous insects received from various shipments for identification during fiscal year 1942–43 (165432).

Forest Service: (Through Dr. Elbert L. Little) 1 plant (163741).

Bureau of Plant Industry: 764 grasses (163661); 1 cultivated plant (164485); 485 grasses (164655); trunk section of "chilte" tree from Mexico (164666); 2 ferns from Texas (164822); (through H. F. Loomis) 2 ferns from Haiti (163517); (through Dr. S. F. Blake) 1 plant (163740); (through B. Y. Morrison) 90 plants from Haiti (163838); (through Dr. O. F. Cook) 1 plant from Ecuador (163924); (through Dr. T. H. Kearney) 1 plant from Arizona (164057); (through Dr. Rogers McVaugh) 8 plants from Haiti (164429).

Soil Conservation Service: (Through Dr. S. C. Happ) 231 subfossil shells from alluvial beds on Galena River, Ill. (164054).

ALDERMAN, Sgt. I. M., Fort Belvoir, Va.: 1 white mole collected by donor at Fort Belvoir, May 19, 1943 (165315).

ALDRICH, Dr. JOHN W. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

ALEXANDER, CLARENCE H., and MENGES, C., Pittsburgh, Pa.: A framed letter from Thomas A. Edison to T. B. A. David, dated December 22, 1877, relative to experiments in inventing the transmitter (165127).

ALEXANDER, Dr. C. P., Amherst, Mass.: 2 nymphomyiid flies (164926, 164965); several thousand miscellaneous flies (164636); 108 tipulid flies, representing 73 species, 9 of which are represented by holotypes and all except 19 by paratypes (165126).

ALLARD, H. A., Arlington, Va.: 2,100 plants from Virginia and West Virginia (164748).

ALLEN, Estate of Col. EDWARD JAY. (See under Mary L. Allen.)

ALLEN, MARY L., Washington, D. C.: 6 California Indian baskets, 1 Haida basket, and 1 beaded knife sheath from the estate of Col. Edward Jay Allen, Pittsburgh, Pa. (163733).

ALLEN, PAUL, Balboa, Canal Zone: 1 crab collected at El Valle, Panama (163400); 2 plants from Panama (163773).

ALLIED CHEMICAL & DYE CORPORATION, *Barrett Division*, New York, N. Y.: 2 war posters (war-production incentives) (164352).

ALONZO, RAÚL, Santiago de Las Vegas, Cuba: 25 plants from Cuba (164194).

AMALGAMATED LITHOGRAPHERS OF AMERICA, Local No. 4, Chicago, Ill.: 2 war posters on conservation of industrial material, 12 duplicates (164353).

AMERICAN BEMBERG CORPORATION, New York, N. Y.: 2 cones and 2 skeins of cuprammonium rayon ("Bemberg") yarn and 19 fabrics woven with all "Bemberg" yarn and combinations of this with silk, spun silk, viscose, spun rayon, and cotton yarns (163834).

AMERICAN CAN CO., Maywood, Ill.: 16 containers for various purposes showing progressive savings of tin from old-style tin can to all-fibre container for liquids (164942).

AMERICAN COLOR PRINT SOCIETY, Camden, N. J.: 30 color prints by 24 artists comprising the American Color Print Society's special exhibition during January 1943 (164543).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.: 3 bird skins from New Guinea of forms new to the collections (163765); (through Dr. C. H. Curran) 7 tachinid flies, representing 3 species (163467); (through John T. Nichols): 1 eel taken by the Askoy Expedition (Dr. R. C. Murphy), at Aguacate Bay, Colombia, dredged from a bottom of gray sand and mud, 25 meters depth (164007).

AMERICAN NATIONAL RED CROSS, Washington, D. C.: 6 war posters (163548).

AMERICAN PHARMACEUTICAL ASSOCIATION, Washington, D. C.: 1 copy of "The National Formulary," ed. 7, 1942 (Official Copy No. 12704), for addition to the exhibit illustrating the history of United States medical standards (163782).

AMERICAN PHOTOGRAPHIC PUBLISHING CO., Boston, Mass.: 74 pictorial photographs, originals of prints reproduced in the American Annual of Photography for 1943 (164706, loan).

AMERICAN SOCIETY FOR THE CONTROL OF CANCER, New York, N. Y.: 3 glass statistical charts on the subject of cancer for the section of public health (164678).

AMERICAN VISCOSE CORPORATION, New York, N. Y.: 1 panel illustrating manufacture of rayon from wood and cotton by the viscose, cuprammonium, and acetate processes; also 17 viscose rayon fabrics woven from filament and spun yarns (163325); 6 bright and dull viscose and acetate rayon yarns, in skeins and wound on cones (163761).

AMERICAN WRITING PAPER CORPORATION, Holyoke, Mass.: 1 offset lithograph, photomechanically reproduced in 7 colors from original water color by Dwight C. Shepler, "The Charles Street Meeting House" (165329).

ANDERSON, GUSTAV, Amityville, N. Y.: 70 pictorial prints for special exhibition in July 1942 (163403, loan).

ANDERSON, Mrs. KATE M., Seaside Park, N. J.: (Through Fanny S. Sweeney) An Anderson shorthand typewriter used by the inventor, George Kerr Anderson (163997).

ANGELL, J. W., New York, N. Y.: 2 tiger beetles (164833).

ANNEREAUX, RALPH F., Sacramento, Calif.: Type specimen of helminth (164164).

ANNETT, MARY, East Jaffrey, N. H.: 1 strawberry root weevil (163600).

ANONYMOUS: 1 bird outline etching by Charles Knapton (1700–1760) after Giovanni da Udine, Italian painter of the 15th–16th century (163443); 1 skeleton of Kagamil winter wren and 3 tracheae of Florida limpkin, found in collection without numbers (164727).

APOLINAR A., BROTHER. (See under Colegio de la Salle.)

ARCHINO, SAMUEL P., Trinidad, B. W. I.: 153 marine mollusks and 11 corals from Trinidad (164673, 165165).

ARLINGTON CAMERA CLUB, Arlington, Va.: 113 pictorial photographs for exhibition during May 1943 (165261, loan).

ARMOUR & Co., Chicago, Ill.: An exhibit illustrating types of glandular diseases and medicines used in their treatment, for addition to the section of pharmacy (163393); 3 samples of synthetic drying oils, ranging in viscosity from a thick honeylike liquid to a thin, almost watery oil (164760).

ATWOOD, HORACE. (See under Mrs. F. W. Wilkison.)

AUGUSTSON, G. F., Los Angeles, Calif.: 1 insect, allotype (163307). (See also under Allan Hancock Foundation.)

AVINOFF, Dr. A. (See under Carnegie Museum.)

AWL, Mrs. AIME M., Washington, D. C.: 1 bat captured in the U. S. National Museum, September 15, 1942 (164877).

BADGER, G. M., Jr.: (Through William B. McIntosh) Fragments of beaver skull collected by G. M. Badger, Jr., near Mountain Lake, Giles County, Va. (164279).

BAHNSEN, AXEL, Yellow Springs, Ohio: 50 pictorial photographs for exhibition during October 1942 (163901, loan).

BAILEY, H. H., Coral Gables, Fla.: 6 house mice collected at Lewis Bay, Labrador, in 1941, by Ernest Doane (164911).

BAILEY, Prof. L. H., Ithaca, N. Y.: 1 plant from Colombia (165415, exchange).

BAILEY HORTORIUM, Ithaca, N. Y.: 2 cultivated plants (164435, 164606, exchanges).

BAKER, Estate of FRANK C.: (Through Mrs. Grace H. Brewer) A large collection of mollusks including many types; also 17 bound volumes of papers published by Mr. Baker (163998).

BALES, Dr. B. R., Circleville, Ohio: 17 Florida marine shells, including 5 holotypes of new species (157334).

BALMER, Estate of CHARLES G.: (Through L. Taylor Hanson) White silk embroidered shawl (163904).

BALTIMORE & OHIO RAILROAD Co., Baltimore, Md.: (Through Robert M. Van Sant) A collection of photographs, drawings, lithographs, etc., comprising the Baltimore & Ohio Co.'s print material housed at Bailey Roundhouse, including the remaining Pangborn wash drawings (164780).

BANGSON, Prof. JOHN S., Berea, Ky.: 20+ parasitic copepods (163235).

BANN, HELEN, Cincinnati, Ohio: 14 wood engravings by James Bann, 1 photographic enlargement of wood engraving, and 1 bookplate (wood engraving) by James Bann (163828).

BANNAN, Dr. M. W. (See under University of Toronto.)

BANNER, A. H., Gig Harbor, Wash.: 4 lots of hippas (164123).

BARBER, H. S., Washington, D. C.: Pair of child's beaded and sinew-sewn skin moccasins from the Dakota Sioux (165347).

BARBOUR, Dr. T. (See under Harvard University, Museum of Comparative Zoology.)

BARECO OIL Co., Tulsa, Okla.: 6 samples of microcrystalline petroleum waxes extracted from crude oils, used in various commercial operations to replace imported waxes now difficult to obtain (164759).

BARNARD, T. A., Jackson Heights, New York, N. Y.: Steatite cooking pot found in sand and rock debris from recently excavated wall of a gravel pit located on the edge of the San Gabriel Wash, in vicinity of Rivas, Los Angeles County, Calif. (165084).

BARNES, A. C., Alexandria, Va.: Hall Scott 4-cylinder, water-cooled airplane engine of 1911 (164368).

BARNES, JOHN T., Washington, D. C.: 1 sawfish blade from specimen taken from Maroni River, French Guiana, about 1930 (163583).

BARTLETT, Prof. H. H., Buenos Aires, Argentina: 77 grasses from Argentina (164935, 165239, 165268); (through Mrs. Agnes Chase) 10 grasses from Sumatra (165319). (See also under University of Michigan.)

BARTLETT, Capt. ROBERT A., New York, N. Y.: Collection of invertebrates, etc., from the Arctic (162959).

BARTLEY, FLOYD, Circleville, Ohio: 1 plant from Ohio (164460).

BARTRAM, EDWIN B., Bushkill, Pa.: 12 plants from Colombia (164983, exchange).

BARTSCH, Dr. PAUL, Washington, D. C.: 5 sets of birds' eggs from Iowa, collected by Bohumil Shimeck (164131).

BAUGHMAN, J. L., Houston, Tex.: 286 fishes from Texas and Florida; crustaceans and mollusks (160191).

BAUSCH & LOMB OPTICAL Co., Rochester, N. Y.: A set of 9 corneal contact eyeglasses for addition to the collection of ophthalmic lenses and spectacles (164456)

BEAMER, Prof. R. H., Lawrence, Kans. (See under University of Kansas.)

BEATTIE, R. KENT, Washington, D. C.: 902 plants, mostly from Oregon, Washington, and eastern Asia (163539, 164193).

BEATTY, HARRY A., Christiansted, St. Croix, Virgin Islands: 5 deer collected in July, August, September 1942, on St. Croix (164450); a collection of reptiles and amphibians from St. Thomas, St. John, St. Croix, and Tortola, Virgin Islands (162940).

BEEBE, Dr. WILLIAM, New York, N. Y.: 12 frogs from Caripito, Venezuela, collected in 1942 (164293).

BEHRE, Prof. ELLINOR H., New Orleans, La.: Small collection of marine invertebrates, 9 mollusks, and 2 brittle-stars (163756).

BENEDICT, JAMES E., Jr., Washington, D. C.: 8 plants from Maryland (165377, exchange).

BENESH, BERNARD, North Chicago, Ill.: 31 cerambycid beetles (164074).

BENNETT, Dr. A. B., Washington, D. C.: Colt's double-barrel shotgun (164675).

BEQUAERT, Dr. JOSEPH, Boston, Mass.: 2 flies (158143, exchange); 4 Hymenoptera (165277).

BJORKMAN, JOHN J., Los Angeles, Calif.: 1 engraving on celluloid and 1 blueprint from engraving (163784).

BLACKBURNE, WILLIAM H., Washington, D. C.: (Through Dr. Charles G. Abbot) A low-power microscope containing a large green beetle said to have been in the donor's family over 90 years (164882).

BLACKMORE, Mr. and Mrs. JOSEPH, Imlay City, Mich.: Sword and newspaper of Civil War period (164806).

BLAKE, Prof. I. H., Lincoln, Nebr.: 70+ Crustacea from Wyoming (145877).

BLAKE, Dr. S. F. (See under U. S. Department of Agriculture, Bureau of Plant Industry, and L. W. Kephart.)

BLOUNT, Mrs. LUCY JORDAN, Waynesboro, Ga.: (Through Lt. Col. H. Cliff Hatcher) United States flag of period of War of 1812 (163694).

BOEING AIRCRAFT Co., Seattle, Wash.:

1 binder containing 31 war posters (164548).

BOHART, Dr. RICHARD M., Los Angeles, Calif.: 27 bugs, comprising 3 types and 24 paratypes of 16 species (158795, exchange).

BOLES, THOMAS. (See under U. S. Department of the Interior, National Park Service.)

BONHAM, Dr. KELSHAW. (See under Elmer O. Pedersen.)

BOURGEOIS, MARIE, Mixcoac, D. F., Mexico: 2,481 mollusks from Mexico (163817, 164068, 164354, 164923, 165008).

BRADY, KEITH and DIONE, Oak Park, Ill.: 10 hand-made lantern slides, in color (163404).

BRENNER PHOTO Co., Washington, D. C.: 1 No. 4, 4×5 Cartridge Kodak manufactured about 1898; 1 B. & L. Volute shutter; 1 B. & L. Zeiss Anistigmat Lens, series 2A, No. 52691, manufactured about 1900 (163729, 164395).

BREWER, Mrs. GRACE H. (See under Estate of Frank C. Baker.)

BRIDGE, Dr. JOSIAH. (See under U. S. Department of the Interior, Geological Survey.)

BRIDWELL, J. C., Washington, D. C.: 1 greensnake from Vienna, Va. (165404).

BRIGGS MANUFACTURING Co., Detroit, Mich.: 13 war posters in duplicate (164587).

BRIND, W. L. (See under A. J. Deering.)

BRITISH INFORMATION SERVICES, New York, N. Y.: 14 screens of photographs comprising an exhibit entitled "Britain's Weapons of War"; also 6 items of portions of German planes shot down in England (163401, loan); 3 models of landing barges, 1 photo of Winston Churchill (heroic size), 2 life-size figures representing respectively a "commando" and a "paratrooper" with full equipment, and a series of enlarged photos, showing war activities of British men and women for special exhibition during December 1942 (164511, loan).

BROADY, Mrs. F. E., Washington, D. C.: Mandarin robe (163668).

BRONZART METALS Co., New York, N. Y.: 39 aircraft recognition models, friendly and enemy types (164566).

BROOKLYN BOTANIC GARDEN, Brooklyn, N. Y.: 53 ferns from Mauritius (163408, exchange): 4 plants from Ecuador (161986, 164687, exchange).

BROWER, Dr. A. E., Augusta, Maine: 74 moths, representing 48 species, and 1 dipterous larva (164275).

BROWN, FREDERICK W., Washington, D. C.: Silver medal commemorating the completion of the Union Pacific Railroad in 1869 (163872).

BRUES, Prof. C. T., Cambridge, Mass.: 6 beetles, bred from prehistoric corn (probably 2,000 years old) from Peru (163211).

BUCHER, WM. F., Washington, D. C.: 12 specimens of domestic and foreign woods collected by donor (165400).

BUDDHUE, JOHN D., Pasadena, Calif.: A piece of the Monahans, Tex., meteorite (weight, 26 grams) (164260, exchange).

BUREN, WM. F., Clinton, Iowa: 153 ants, representing 21 species, 5 of which are represented by 16 paratypes (164410, exchange).

BURT, Prof. CHARLES E., Winfield, Kans.: A small collection of chiggers from Kansas (163340).

BURTON, CHARLES, Greenbelt, Md.: Earthenware vessels, clay heads, spindlewhorl, etc., collected near the ruins of Calixtlahuaca (Temple of the Wind), near the city of Toluca, State of Mexico, Mexico (163628).

BUSHNELL, Mrs. DAVID I., Washington, D. C.: 2 canoe paddles described as having been made for David I. Bushnell, Jr., in 1895 by Micmac Indians, Bay of Charloa, Nova Scotia, and a toy steamboat of about 1885, (164236).

BUSHONG & Co., Portland, Oreg.: 1 war poster and duplicate (war-production incentive) (164210).

BUTLER, Rear Admiral CHARLES S. Bristol, Tenn.: A sandstone concretion cemented by limonite, from Bristol (165022).

BUTTS, Dr. CHARLES, Washington, D. C.: Approximately 500 Pleistocene mollusks from Golconda, Ill. (164069).

CABALLERO Y C., Prof. EDUARDO, Chapultepec, Mexico: Cotypes of nematode (163112).

CABRERA, Dr. ÁNGEL L. (See under Museo de La Plata.)

CAHN, Dr. A. R. (See under Tennessee Valley Authority.)

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 271 plants (164289, 164434, exchanges); 14 plants from the western United States (164530, 164778, exchanges); (through Dr. Wilbert M. Chapman) 17 fishes, including 6 paratypes (164782, exchange); (through Dr. Robert C. Miller) 4 paratypes of fishes (163641, exchange).

CALIFORNIA DEPARTMENT OF NATURAL RESOURCES, *Division of Fish and Game*, San Francisco, Calif.: (Through

Brian Curtis) 2 parasitic isopods (164154).

CALIFORNIA, UNIVERSITY OF, *Department of Botany*, Berkeley, Calif.: 301 plants(163396, 164542, exchanges).

CALKINS, FRANK C. (See U. S. Department of the Interior, Geological Survey.)

CALVERT DISTILLERS CORPORATION, New York, N. Y.: 9 antiprohibition posters (163797).

CAMERA, THE, Baltimore, Md.: (Through E. V. Wenzell): 1 4×5 Blair Camera Co. camera, patents, 1887–1890; 5 4×5 Plate Holders, patents, 1875, 1883, 1884 (165446).

CAMERA CLUB, THE, New York, N. Y.: 54 pictorial photographs exhibited during December 1942 (164391, loan).

CAMERON, Mrs. FAYE I., Delleker, Calif.: 3 opalized wood specimens from Plumas County, Calif. (163612).

CANADIAN GOVERNMENT, *Department of Agriculture, Entomological Branch*, Ottawa, Canada: (Through Dr. J. McDunnough) 7 moths (164183, exchange); 7 Lepidoptera, representing 4 species, all paratypes (164963, exchange); (through G. Stuart Walley) 4 Hymenoptera (paratypes) (163359); 29 Hymenoptera, including paratypes of 3 species and a male of a species not previously represented in the collections (164364, exchange); 4 Hymenoptera, representing 4 species (164891, exchange).

CANFIELD, Mrs. MARY C., Grayling, Mich.: 1 plant from Michigan (162649).

CANNON, Dr. JOSEPH, Seldovia, Alaska: Japanese brass 20-mm. cartridge case, Chinese bank note, oil portraits of the Emperior Nicholas II and the Empress Alexandra of Russia, and the autograph of Tseo Tsung Chiang (164501).

CAPLAN, ALLAN, New York, N. Y.: A blue topaz pebble from Minas Novas, Minas Geraes, Brazil (163716).

CARBOLOY CO., INC., Detroit, Mich. 3 war posters (164589).

CARCELLES, Dr. ALBERTO, Buenos Aires, Argentina: 265 mollusks (164248, exchange).

CÁRDENAS, Dr. MARTÍN, Cochabamba, Bolivia: 45 plants from Bolivia (163640); 2 beetles from Bolivia (164867). (See also under Universidad Autónoma de Cochabamba.)

CARNEGIE MUSEUM, Pittsburgh, Pa.: 2 beetles (163932, exchange); 1 skeleton of a fossil mammal (165231, exchange); (through M. Graham Netting) 6 frogs from Brazil, collected by John D. Haseman in 1907–9 (163617, exchange); (through Dr. A. Avinoff) 9 Lepidoptera, representing 6 species or subspecies (164726, exchange); 1 lepidopteron, cotype (164847, exchange); 29 bird skins collected by the Holt Expedition (165131).

CAROLINA BIOLOGICAL SUPPLY CO., Elon College, N. C.: (Through Prof. Thomas E. Powell) 3 shipworms (163436).

CAROTHERS, R. S., Selma, Ala.: A pair of beaded deerskin moccasins bought by donor's father in 1891 from the Apache chief Geronimo while he was a prisoner of war at Mount Vernon, Ala.; also a discoidal stone plowed up in a field near Cahaba, Ala. (165033).

CARPIN, Mrs. THEODORE, Washington, D. C. (See under Daughters of Ukraine.)

CARR, Mrs. WILBUR J., Washington, D. C.: 45 coins, 15 medals, 7 medalets, and a "widow's mite" (164481).

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C.: 33 plants (164-540, exchange); 2 plants from Canada (164894, exchange).

CAVENAUGH, Dr. R. LA T. (See under Panama Canal.)

CECIL, EMMA CAROLINE SCHENCK: 139 pieces of "Peachblow" glass made by the New England Glass Co., East Cambridge, Mass., in the 1880's (164184, bequest).

CEOUGH, RICHARD, New York, N. Y.: 2 Chamula costumes from Tenejapa, near San Cristóbal (Las Casas), Chiapas, Mexico (164992).

CERECERO, MARÍA CRISTINA, Chapultepec, Mexico, D. F.: 1 specimen of new species of helminth (164774); cotype of helminth (164968).

CHACE, Dr. FENNER A., Jr., Cambridge, Mass.: 50 amphipods (164-397). (See also under Harvard University, Museum of Comparative Zoology.)

CHAMBERLAIN FUND, FRANCES LEA, Smithsonian Institution: 237 operculate land shells (163559); 1 blue topaz from Minas Geraes, Brazil, weighing 54.37 carats (163626); 27 mollusks (164694).

CHAMBLISS, Dr. CHARLES E., Washington, D. C.: Pole of worked pine used by Chippewa Indians to push and guide boat from which "wild rice" is gathered at harvest time, obtained by donor in the vicinity of Mille Lacs, Minn., in 1923 (164190).

CHAPIN, Dr. E. A., Washington, D. C.: 2 Ukrainian decorated Easter eggs (164756); 1 Cuban grassquit (164958).

CHAPMAN, Dr. WILBERT M. (See under California Academy of Sciences.)

CHARLESTON MUSEUM, Charleston, S. C.: (Through G. Robert Lunz, Jr.)

17 fishes from the West Indies, collected by C. J. D. Behrens (165340).

CHASE, Mrs. AGNES, Washington, D. C.: 31 grasses from tropical America (163582); 38 grasses from China, collected by Dr. Yi-li Keng (163719); 49 grasses from the Philippine Islands (163846); 122 grasses from Mongolia (164681); 4 grasses from Southern United States (164705); 10 grasses from Argentina (164893); 61 grasses collected in India by Walter Koelz (165128); 28 grasses from the East Indies (165318); 6 grasses from South America (165334); 50 plants from China and Philippine Islands (165379) 2 grasses from Fiji (165442). (See also under Prof. H. H. Bartlett.)

CHAYES, Dr. FELIX, Washington, D. C.: (See under U. S. Department of the Interior, Bureau of Mines.)

CHITTICK, HOWARD A., McLean, Va.: 1 palm warbler (165271).

CIVILIAN DEFENSE, OFFICE OF, Washington, D. C.: 24 war posters (163564).

CIVIL WORKS ADMINISTRATION, in cooperation with Smithsonian Institution: Bones of 4 species of birds, collected at Buena Vista Lake, Kern County, Calif., in 1933 by Dr. Waldo R. Wedel (162086).

CLAFLIN, C. A., West Medford, Mass.: 1 specimen of helvite from Butte, Mont. (165269).

CLARK, AUSTIN H., Washington, D. C.: 22 butterflies, representing 11 species of Nearctic Rhopalocera, collected May 3, 1942 (163391); 3 crayon lithographs drawn by A. Friedel after daguerreotypes of geological specimens, 6 duplicates, from the estate of Dr. Walter Fewkes (164914); 27 sabellid worms (152943).

CLARK, L. M. (See under Shell Oil Co.)

CLAUSS, EUGENE A., Providence, R. I.: A brochure, "The Library of the Rhode Island School of Design," by Evelyn Chase, and a booklet, "University Hall," both examples of fine printing (164544).

CLEMENTS, J. MORGAN, Demopolis, Ala.: 1 string of turquoise beads, probably Turkestan, purchased in Urga, Mongolia, and several synthetic rubies from the first artificial rubies made by Prof. Henri Moissan (164408).

CLOKEY, IRA W., South Pasadena, Calif.: 14 plants from Nevada (164101).

COLBURN, Dr. WM. E. (See under Cranbrook Institute of Science.)

COLEGIO DE LA SALLE, Cartegena, Colombia: (Through Brother Apolinar A.) 82 plants from Colombia (163908).

COLLIER, ALBERT, Rockport, Tex.: 1 hermit crab, 2 anemones (147157).

COLLOM, Mrs. ROSE E., Payson, Ariz.: 58 plants from Arizona (163419, 163731, 164297).

COMMERCIAL SOLVENTS CORPORATION, Terre Haute, Ind.: 4 samples of recently developed commercial solvents (164732).

COMSTOCK, Dr. JOHN A., Los Angeles, Calif.: 4 Lepidoptera—2 paratypes of each of 2 species (164189).

CONARD, Prof. HENRY S., Grinnell, Iowa: 17 ferns from Java (163398); 43 plants (163922, exchange); 122 plants from Maryland and Virginia (164623, 165444, exchanges).

CONFERENCE ON DISTRICT FLORA, Washington, D. C.: 17 plants from the vicinity of Washington, D. C. (164849).

CONSOLIDATED LITHOGRAPHING CORPORATION, Brooklyn, N. Y.: 2 war posters (163829).

COOK, Prof. ERNEST FULLERTON. (See under U. S. Pharmacopoeial Convention.)

COOK, FANNYE A. (See under Mississippi Game and Fish Commission.)

COOK, Dr. O. F. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

COOKE, Dr. C. WYTHE, Washington, D. C. (See under G. M. Ponton and Prof. Gayle Scott.)

COOLEY, Dr. R. A. (See under Federal Security Agency.)

COOPER, Dr. G. A. (See under Smithsonian Institution, National Museum.)

COPELAND, Dr. STANLEY G., Columbus, Ohio: (Through Robert Goslin): 1 bone of the little brown crane (164682.)

CORNELL UNIVERSITY, Ithaca, N. Y.: (Through V. S. L. Pate) 2 wasps, paratypes (107954, exchange); (through Prof. Robert Matheson): 39 specimens of mosquito material, including 8 adults, 24 larvae, 4 cast larval skins, and 3 cast pupal skins, representing in all 19 species (164305, exchange); (through Dr. Wm. T. M. Forbes) 2 Lepidoptera (164858).

CORNING GLASS WORKS, Corning, N. Y.: 13 specimens of commercial and laboratory glassware, showing examples of 96 percent silica glass, low-actinic red glass, glass for industrial piping, and fritted glass (164966).

CORNMAN, Mrs. L. R., San Diego, Calif.: 42 plants from Panama (163383).

COTA, F. M., San Diego, Calif.: 5 plants from California (163802).

COTTON-TEXTILE INSTITUTE, INC., New York, N. Y.: 25 specimens of cotton fabrics produced by American manufacturers for the spring and summer of 1943 (164777).

COWLES, Prof. HENRY T., Mayagüez, Puerto Rico: Plant from Puerto Rico (164085).

CRANBROOK INSTITUTE OF SCIENCE, Bloomfield Hills, Mich.: (Through Dr. Wm. E. Colburn) Minerals from Michigan and Ohio (165107).

CRAWFORD, Dr. D. L., Washington, D. C.: 3,093 insects (163791).

CRUVER MANUFACTURING Co., Chicago, Ill.: A complete set of 82 scale-model airplanes manufactured for the U. S. Navy to be used in training for recognition, range estimation, and gunnery practice (164978).

CURRAN, Dr. C. H. (See under American Museum of Natural History.)

CURTIS, BRIAN. (See under California Department of Natural Resources.)

CURTISS, ANTHONY, Port-au-Prince, Haiti: 13 jars of reptiles, amphibians, fishes, crustaceans, insects, and mollusks, mostly from Haiti (165073.)

CUTLER, Dr. HUGH C., São Paulo, Brazil: 19 plants from Bolivia (165413).

DAILY, W. A., Indianapolis, Ind.: 45 plants (163783).

DANIEL, Rev. Brother, Medellín, Colombia: 58 plants from Colombia (164900, 164490); 29 mollusks and a small collection of miscellaneous insects from Colombia (164536).

DA ROCHA, Prof. DIAS, Ceara, Brazil: 1 lizard (163760).

DAUGHTERS OF UKRAINE, *Gold Cross Chapter*, Chicago, Ill.: (Through Mrs. Theodore Carpin) 6 Ukrainian Easter eggs (163362).

DAVIS, Prof. RAY J. (See under University of Idaho.)

DAVIS & GECK, INC., Brooklyn, N. Y.: 122 tubes of surgical sutures for use in the suture exhibit (163632).

DEAM, Dr. CHARLES C., Bluffton, Ind.: 16 plants from the United States (165026).

DE CHAMPLAIN, Rev. A. A., Rimouski, Quebec: 8 mollusks from Canada, Algiers, and the Red Sea (164299).

DEERING, A. J., New York, N. Y.: (Through W. L. Brind) Cotype of tropical fish from donor's aquarium; specimen originally collected in Río Magdalena, Colombia (165062).

DEGENER, OTTO, New York, N. Y.: 512 plants from the Hawaiian Islands (164340, 164752, 164860, 164513, 165085).

DEIGNAN, H. G., Washington, D. C.: Specimen of grass from Virginia (165376).

DELANO, Hon. FREDERIC A., Washington, D. C.: Coins and medals and 2 ivory scrimshaw carvings (165206).

DELONG, Prof. D. M., Columbus, Ohio: 30 named bugs, representing 16 species, all paratypes (163826).

DENDY, JACK S. (See under Tennessee Valley Authority.)

DENLEY, C. F., Glenmont, Md.: 1 Mikado pheasant (163598).

DICKINSON, GLADYCE E., Washington, D. C.: 1 woven bag and 1 netted hammock of sisal fiber fashioned by a Maya Indian in Muna, near Merida, Yucatán (163734).

DICKINSON, W. E. (See under Milwaukee Public Museum.)

DIDDELL, Mrs. W. D., Jacksonville, Fla.: 2 plants from Florida (164521, 164971).

DIERS, HERMAN H., Washington, D. C.: Wood engraving of the Smithsonian Institution Building published in 1871 (164117); lithograph by Julian, after Powell, showing De Soto and a youthful companion at the time of the discovery of the Mississippi River (164951); 10 prints relating to the history of the Smithsonian Institution (165185).

DIETRICH, Dr. HENRY, Ithaca, N. Y.: 49 beetles collected in New York State (163487); 1 specimen of blind weevil collected by Dr. Dietrich at Lucedale, Miss. (164676).

DIX, W. L., Morrisville, Pa.: 4 ferns from Wayne County, Pa. (164032).

DOBBIN, CATHERINE N., Northampton, Mass.: 3 amphipods and 11 copepods parasitic on gills of young codfish from Mount Desert Island, Maine (159231).

DOLLEY, JOHN S., Merritt, Wash. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

DOUGHERTY, ELLSWORTH C., Berkeley Calif.: 50+ amphipods from California and Oregon (164084); holotype and allotype of helminth (164255); 50+ isopods and 100+ amphipods (164580); 2 botfly larvae, parasitic on the mountain beaver (164683); 8 parasitic worms (164872).

DOUGLAS AIRCRAFT Co., INC., Santa Monica, Calif.: Wind-tunnel model of the Douglas DC–4, painted with minor alterations for display purposes (148661).

DOW CHEMICAL Co., Midland, Mich.: 5 lengths of Saran plastic pipe with 6 pipefittings, 5 lengths of Saran tubing, and 16 lengths of Ethocel tubing in various colors (165091).

DOWNS, Dr. WILBUR G., Trinidad, B. W. I.: 1 silky anteater (mounted), collected on the Island of Trinidad (164952).

DRAKE, Prof. CARL J., Ames, Iowa: 12 bugs, representing 6 species, 4 of them

by 7 paratypes (163541); 6 bugs collected in the Canal Zone (163812).

DROUET, Dr. FRANCIS, Chicago, Ill.: 16 algae from Plummers Island, Md. (164346).

DRYANDER, Mrs. EDITH, La Blanca, Cali, Colombia: 45 plants from Colombia (163637).

DUCKE, Dr. A., Manáos, Brazil: 9 plants from Brazil (165028, 165147, 164750).

DUGAND G., Dr. A. (See under Instituto de Ciencias Naturales.)

DUKE UNIVERSITY, Durham, N. C.: 10 ferns from Puerto Rico (164733, exchange).

DU PONT, E. I., DE NEMOURS & Co., INC., Wilmington, Del.: 1 specimen of light Cellophane fiber, made by injecting bubbles of air in the fiber as it is formed; 3 specimens of rayon tow for mechanical packing; and 3 special applications of Nylon as household screening, tapered bristles, and a paint brush (165438).

EAKIN, Mrs. M. S., Pittsburgh, Pa.: Wool sampler map of Ireland made during the first quarter of the 19th century in Raphone, northern Ireland, by Catherine Russell, great-great-aunt of Maj. M. S. Eakin (164337).

EASTMAN KODAK Co., Rochester, N. Y.: (Through C. E. K. Mees) A specimen of carrollite from Rhokana, Rhodesia (164464).

EDISON, THOMAS A., INC., West Orange, N. J.: 20 war posters (164547).

EDUCATIONAL ART SERVICE Co., New York, N. Y.: 1 patriotic poster print, set up in Denby type (165088).

EDWARDS, RICHARD A., Gainesville, Fla.: A collection of types of Miocene Ostracoda from the Duplin marl of North Carolina (164819).

EFFERVESCENT PRODUCTS, INC., Elkhart, Ind.: 1 urine-sugar analysis set for addition to the pharmacy collection (163920).

EINSON-FREEMAN Co., Long Island City, N. Y.: 5 war posters after paintings by McClelland Barclay (164186).

ELLIS, T. KENNETH, Hot Springs, Va.: 3 vials of amphipods and 1 pinnotherid crab from South Carolina (152815).

EMERY, Dr. W. O., Washington, D. C.: An iron object resembling a driving point or shoe for a wooden pile recovered from the Rhine River at Cologne about 1902–3 and supposedly a relic of a bridge erected by the Romans there during the second to fourth centuries A. D. (164430).

EMMERSON, MILO ELSON, Washington, D. C.: An early American blown-glass funnel, period of 1770, for addition to the history of pharmacy collection (163659); 3 early American blown-glass medicine bottles (164982).

EMPLOYERS' GROUP, THE, Boston, Mass.: 15 war posters (14 duplicates) (164392).

ENGELHARDT, GEORGE P. (deceased), Scarsdale, N. Y.: 4,300 miscellaneous insects, mostly Lepidoptera, and a small collection of books and papers on entomological matters (bequest, 163515).

ESCUELA SUPERIOR DE AGRICULTURA TROPICAL, Cali, Colombia: (Through Dr. Ángel Ibarra C.) 116 plants from Colombia (163639, exchange); (through Cecil Miles) 61 fishes, mostly from the Río Cauca, Colombia, including 1 paratype from Honda, Río Magdalena (164853).

FABRI, RALPH, New York, N. Y.: 35 etchings, for exhibition during December 1942 (164350, loan).

FAIRBANKS, E. E., College Park, Md.: A collection of dufrenite concretions from the excavations of the Bureau of Standards Radio Station, 2 miles east of Greenbelt, Md. (164436).

FALKEN, AUGUST, Jamaica, L. I., New York: Water-color drawings, about 14" × 22", of the U. S. S. *Boston* and the U. S. S. *Maine*, by Charles E. Oehl (163824).

FARLOW HERBARIUM, Cambridge, Mass.: 32 plants from Fiji (164539, exchange).

FASSETT, Prof. NORMAN C. (See under University of Wisconsin.)

FEDERAL SECURITY AGENCY:

U. S. Public Health Service, Rocky Mountain Laboratory, Hamilton, Mont.: (Through Dr. R. A. Cooley) 2 paratype ticks (163781).

U. S. Public Health Service, Whitehorse, Yukon: (Through Malcolm Pirnie, Jr.) 11 mosquitoes, representing 3 species, all females, collected in Alaska in 1943 (165365).

FEIS, Mrs. HERBERT, Washington, D. C. (See under Mrs. Joseph Stanley-Brown.)

FENLON, Mrs. EDWARD F., Kansas City, Mo.: Male Indian skull without lower jaw, believed to be that of a Cheyenne chief killed in northwestern Kansas about the time of the construction of the Union Pacific Railroad (163562).

FENNAH, Dr. R. G., St. Augustine, Trinidad, B. W. I.: A small collection of Homoptera, including types of 6 new species (164188).

FERGUSON, Mrs. ALICE L. L., Wash-

ington, D. C.: Skeletal remains from ossuary No. 2 on Mrs. Ferguson's farm near Accokeek, Prince Georges County, Md. (164276); skeletal remains from ossuary No. 4, Ferguson Farm (164913).

FERRIS, Estate of Mrs. ANNETTE R.: (Through Dr. Ernest N. Ryder) Bridal chest of oak bound with iron, 1712 (164197).

FESSENDEN, G. R., Washington, D. C.: 4 plants from Maryland and Oregon (164411).

FIELD, Mrs. BEATRICE, Winchester, Mass.: 37 lead-pencil drawings for special exhibition during October 1942 (163877, loan).

FIELD, W. D., Washington, D. C.: 34 Lepidoptera, including holotype of a new species (163389). (See also under H. A. Freeman.)

FIELD MUSEUM OF NATURAL HISTORY, Chicago, Ill.: 119 plants, mostly lower cryptogams, from Guatemala (164390, 164557, exchanges); 1,279 plants collected in Guatemala by Dr. J. A. Steyermark (164880, exchange); 1 plant (164751, exchange); 101 plants (lower cryptogams) (165300, exchange).

FIGGINS, Dr. J. D. (See under University of Kentucky).

FIRTH-STERLING STEEL Co., McKeesport, Pa.: 6 war posters (164871).

FISHBACK, FORD, Louisville, Ky.: A painted calabash from Santarem, Brazil; woven hammock from Iquitos, Peru; feathered dance headdress of the Canelos Indians living on the Río Bobonaza, Oriente Province, Ecuador; and a stick of tobacco from Sihuinisla, near Andoas, on Río Pastaza, Oriente, Ecuador, collected by donor in February 1931 (164072).

FISHBURNE, B. P., Washington, D. C.: Square with rosettes and leaves embroidered in gold thread in high relief, from Iran or Kashmir (163843)

FISHER, Dr. A. K., Washington, D. C.: Photograph of plant (164658).

FISHER, Dr. WALTER K., Pacific Grove, Calif.: 49+ echiuroids, including 7 types and 1 paratype (165146); 11 photographs of ornithologists (165471). (See also under Hopkins Marine Station.)

FISHERY TECHNOLOGY LABORATORY. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

FLEETWOOD, RAYMOND J. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

FLEMING, GEORGE E., Washington, D. C.: 2 United States swords of about 1850 (163938).

FLORIDA STATE MUSEUM, Gainesville, Fla.: 104 mollusks from Florida (151866); (through Prof. T. Van Hyning) 5 specimens of *Conus* (164686).

FLUKE, Prof. C. L., Madison, Wis.: 2 flies, females (164696).

FORBES, Dr. WM. T. M., Ithaca, N. Y. (See under Cornell University.)

FOSHAG, Dr. W. F., Washington, D. C.: Stone carvings from the State of Guerrero, Mexico (163629). (See also under Smithsonian Institution, U. S. National Museum.)

FOSTER, JOHN G., Walnut Ridge, Ark.: 1 pecan weevil (164218).

FOX, PORTLAND P., Gilbertsville, Ky.: 300 Lower Devonian fossils from western Tennessee (163357); 1 specimen of vivianite and 3 specimens of limonite from the Tennessee River at Kentucky Dam (163488); 1 specimen of stalactitic limonite from Ellington, Mo. (163780); 300 Lower Devonian fossils from West Tennessee (163977); approximately 150 Lower Devonian fossils from northwestern Tennessee (164332).

FRAMBURG, H. A., & Co., Chicago, Ill.: Miniature models of American and German tanks and armored vehicles (28 specimens) (163841).

FRANKLIN, H. H., Syracuse, N. Y.: 4 early die castings and a commercial circular of H. H. Franklin Manufacturing Co., on "finished castings" (163228).

FRAPRIE, FRANK R., Boston, Mass.: 8 pictorial photographs (164134, exchange).

FRASER, Dr. HUGH M., Oakland, Calif.: (Through Dr. Riley D. Moore) A photograph of the 1892 faculty and students of the American School of Osteopathy, Kirksville, Mo., for addition to the osteopathic collection (163635).

FREDERICK, A. C., Albany, N. Y.: 46 Lepidoptera, representing 24 species (163392).

FREELAND, EDWARD D. (See U. S. Department of the Interior, National Park Service.)

FREEMAN, H. A., White Deer, Tex.: (Through W. D. Field) 10 insects, all paratypes, representing 7 species of Lepidoptera (164990); 2 Lepidoptera (165005).

FREY, DAVID G., College Park, Md., (See under U. S. Department of the Interior, Fish and Wildlife Service.)

FRITZSCHE BROTHERS, INC., New York, N. Y.: 1 war gas identification kit consisting of 6 small vials containing 5 samples of liquids closely resembling

in odor the smells of phosgene gas, lewisite gas, chloracetophenone gas, chlorpicrin gas, and mustard gas; also 1 sample of cleaning agent used for removing these odors (164757).

FRIZZELL, Dr. DON L., Guayaquil, Ecuador: (Through Dr. T. W. Vaughan) Topotypes of Foraminifera and typical specimens from another locality, all from northwestern Peru (164980, exchange).

FROESCHNER, R. C., St. Louis, Mo.: 2 insects, type and allotype of a new species (164702).

FROST, C. A., Framingham, Mass.: A small collection of beetles (163300); a small collection of miscellaneous insects (164652).

FULLER & D'ALBERT, INC., Washington, D. C.: 1 lens, No. 7747, Edward Anthony (164203, exchange).

GABRIEL, DONALD, Detroit, Mich.: Calcite specimen from Quincy mine, Hancock, Mich., and fluorite and celestite from Clay Center, Ohio (164331).

GABRIELSON, Dr. IRA N. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

GALLEGO M., Dr. F. LUIS, Medellín, Colombia: A collection of miscellaneous insects from Colombia (162707, 165124).

GALTSOFF, Dr. PAUL. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

GARDNER, Maj. FLETCHER, San Antonio, Tex.: 2 bamboo flutes, 2 jew's-harps, and an inscription on bamboo from the Southern Mangyan with translation and transliteration, also an inscription from the Buhil-Mangyan of Mindoro, P. I. (164633).

GENERAL CABLE CORPORATION, New York, N. Y.: 3 war posters (164976).

GENERAL CERAMICS Co., Keasbey, N. J.: 3 porous tile reaction cells and 2 porous tile separator plates used for certain types of chemical reactions in commercial chemical manufacture (164892).

GENERAL MOTORS CORPORATION:

Fisher Body Division, Detroit, Mich.: 1 set of 17 war posters (164393).

General Motors Truck & Coach Division, Pontiac, Mich.: 32 war posters (164394).

Oldsmobile Division, Lansing, Mich.: 1 set of "Keep 'em Firing" war-production stimulation posters (43) (164371).

GENTNER, L. G., Talent, Oreg.: 3 beetles (163878).

GEORGETOWN UNIVERSITY, Washington, D. C.: (Through Rev. Father Lawrence Gorman) The John W. Langsdale mineral collection (1,500 specimens) from Georgetown University (165344); (through Father A. O'Leary) 140 birds and 7 mammals from various parts of the world (164482).

GERARD, RAOUL, Los Angeles, Calif.: Water-color drawing of a British "Inniskilling" Dragoon of 1742 (163823).

GILMORE, C. W. (See under Smithsonian Institution, National Museum.)

GINSBURG, ISAAC, Washington, D. C. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

GLASS, JEWELL J. (See under U. S. Department of the Interior, Geological Survey.)

GLYCO PRODUCTS Co., INC., Brooklyn, N. Y.: 7 samples of synthetic waxes or waxlike solids used as substitutes for various hard-to-obtain natural waxes; also 3 samples of synthetic oily liquids used as substitutes for glycerine and dibutyl phthalate (164758).

GODDARD, ARCHIBALD N., Detroit, Mich.: 1 polished specimen of thomsonite from Isle Royale, Lake Superior, Mich. (163955).

GOODNIGHT, CLARENCE J., Brooklyn, N. Y.: 4 slides of branchiobdellids, holotypes of 4 new species (163177).

GOODRICH, B. F., Co., Akron, Ohio: Specimens of crude and finished articles of Koroseal and of synthetic rubbers, including Hycar, Ameripol, Neoprene, Norepol, and Thiokol, and 2 flow-chart photo panels illustrating synthesis of rubber and Koroseal with samples of chemicals; also a natural-rubber, wire-tread aircraft tire and a "War" reclaim tire (165216).

GOODWIN, Dr. RICHARD H. (See under University of Rochester.)

GORDON, DONALD P., Beaufort, N. C.: (Through Dr. A. S. Pearse) 5 amphipods, 6 isopods, 3 copepods, and 1 crab larva (163284).

GORDON, I. L. (See under Reading Co.)

GORDON, Lt. WM. M., Corpus Christi, Tex.: 68 dragonflies from Missouri and Tennessee (164812).

GORMAN, Rev. Father LAWRENCE. (See under Georgetown University.)

GOSLIN, ROBERT, Columbus, Ohio: 1 lot of bird bones from Feurt Village site, Ohio (161998). (See also under Dr. Stanley G. Copeland.)

GRASSMAN, PETER, Phoenix, Ariz.: 30 beetles (163233).

GREEK OFFICE OF INFORMATION, Washington, D. C.: 1 war poster, "Greece Fights On," and 1 duplicate (165169).

GREGOR, Dr. D. K., Fulton, Mo.: 41 Devonian mollusks from central Missouri (164107); 85 brachiopods from the Devonian of central Missouri and about 50 crinoids and other invertebrate fossils from the Bainbridge limestone of southeastern Missouri (164721).

GRIM, Dr. RALPH E., Urbana, Ill. (See under Illinois State Geological Survey Division.)

GURNEY, Lt. A. B., Washington, D. C.: A collection of miscellaneous insects, including 1 schmitt box of miscellaneous insects, 1 schmitt box of mosquitoes, 2 schmitt boxes of Orthoptera, 51 slides of fleas, mosquitoes, etc., 26 vials of alcoholic material, fleas, ticks, etc. (165313).

HAAS, MERRILL W., and LOGUE, L. L., Caripito, Venezuela: Holotype and paratypes of a foraminifer from the Upper Miocene of Venezuela (165283).

HAERING, D. W., & Co., INC., Chicago, Ill.: Exhibit case containing 5 specimens of sections of pipe showing corrosion and boiler scale; also 1 specimen each of Tetra-Phosphoglucosate and Chrom-glucosate used in the prevention of corrosion and the formation of boiler scale (164816).

HALL, Mrs. BARBARA (deceased). (See under William Evelyn Jones.)

HAMBURGER, Mrs. M. E., Washington, D. C.: 1 mounted specimen of hawksbill turtle (164592).

HAMILTON, Dr. JAMES, New York, N. Y.: 1 sea snake from near Santa Elena Bay, Ecuador (164447).

HANCOCK, ALLAN, FOUNDATION, Los Angeles, Calif.: (Through G. F. Augustson) 1 slide containing a rare genus of flea (164220).

HANSON, L. TAYLOR. (See under Estate of Charles G. Balmer.)

HAPP, Dr. S. C., Winona, Minn.: 505 Pleistocene land and fresh-water shells from Winona County, Minn. (163627). (See also under U. S. Department of Agriculture, Soil Conservation Service.)

HARPER, Dr. R. M., University, Ala.: 41 plants from Alabama and 53 photographs of Alabama plants (164645).

HARPER, ROBERT B., Baltimore, Md.: (Through W. H. Harper) Uniform coat, trousers, cap, hat, vest, and pair of spurs owned during the Civil War by Col. Robert W. Harper, Confederate States Army (163704).

HARPER, W. H. (See under Robert B. Harper.)

HARRIS, SEYBOLD, POTTER Co., Cleveland, Ohio: 12 war posters and 2 war notices (163958).

HART, H. H., Belle Glade, Fla.: 2 Indian figurines (wood) found at Belle Glade, Palm Beach County, Fla. (164970).

HART, Dr. J. L., Nanaimo, British Columbia: 40 amphipods, 1 cumacean, 2 isopods, 3 shrimps or shrimp larvae (163505).

HARTMAN, Dr. OLGA, Los Angeles, Calif.: 2 mollusks from Beaufort, N. C. (163354.)

HARVARD UNIVERSITY:

Arnold Arboretum; Jamaica Plain, Mass.: 2,236 plants (163720, exchange); 2 grasses from Fiji (164262 exchange); 1,167 plants from the Fiji Islands collected by Otto Degener (164654, exchange);

Gray Herbarium, Cambridge, Mass.: 84 ferns (164342, 164650, exchanges); 5 photographs of plants from Colombia (163847, exchange); 197 specimens of ferns, mostly from Venezuela (164541, exchange); 1 plant from Texas (165158, exchange); 1,670 plants from various regions (165316, exchange).

Museum of Comparative Zoology, Cambridge, Mass.: 1 skull and lower jaws of an extinct horse from Miocene of Florida (163287, exchange); paratype of mollusk from Bahamas (163714); right ramus of fossil horse from Lower Miocene, Hawthorne formation, Thomas Farm, Gilchrist County, Fla. (164399, exchange); 2 cotypes of mollusks (165103); 6 cotypes of fishes collected in Lago do Maximo, Brazil, by Louis Agassiz in 1865 (165121, exchange); (through Dr. Thomas Barbour) 564 fishes from South America collected by Louis Agassiz on the Thayer Expedition (163486); 2 ducks (164251); (through Dr. Fenner A. Chace, Jr.) 2 crustaceans (154703, exchange); 1 crab and 2 aeglas (164235, exchange); (through James L. Peters) 2 black-lored grass warblers (164708, exchange).

HASBROUCK, Dr. E. M., Washington, D. C.: 5 fulvous tree ducks (165272).

HATCHER, Lt. Col. H. CLIFF. (See under Mrs. Lucy Jordan Blount.)

HATCHETT, STEPHEN P., Ann Arbor, Mich.: 928 + isopods (164375, 164693).

HATZES, Mrs. GEORGE A. (See under Elsie Ullrich.)

HAUGHT, OSCAR, Littleton, W. Va.: 2,320 plants from Ecuador and a considerable number of shells (165285); obsidian mirror found in a stream bed at Olmedo, about 20 km. south of Santa Ana, Manabí Province, Ecuador (165314).

HAWKINS, A. C., Winchester, Va.: Collection of miscellaneous minerals

from Virginia, North Carolina, and Georgia (163500).

HAY, W. P., Bradenton, Fla.: 4 moles and 1 rice rat collected by donor at Englewood and Bradenton, Fla. (164449, 164868).

HAYWARD, WYNDHAM, Winter Park, Fla.: 1 plant cultivated in Florida (163669).

D'HEGUERT, Dr. J. SAER, Valencia, Venezuela: 35 plants from Venezuela (165180).

HENDLEY, FLORA L., Washington, D. C.: Collection of 14 shawls, laces, and other objects of period art (165474).

HENNESSEY, LEROY, Longwood, Fla.: Specimen of the woody stem of the common rosemallow (165233).

HERMANN, Dr. F. J., Greenbelt, Md.: 5 United States plants (164921).

HESS, FRANK L., College Park, Md.: 1 specimen of allanite from Sandy Mush Creek, Buncombe County, N. C. (163937); 6 concretions from Bureau of Standards Radio Station 2 miles east of Greenbelt, Md. (164274).

HESTER, J. PINCKNEY, Phoenix, Ariz.: 11 plants from the western United States (163343, 163732, 163911).

HEWATT, Prof. WILLIS G., Fort Worth, Tex.: 25+ amphipods and 28 isopods from Texas (159187); 21 crustaceans from Texas (160080).

HEYE, PAUL. (See under U. S. Department of the Interior, Fish and Wildlife, Service.)

HIBBARD, RAYMOND R., Buffalo, N. Y.: 150 Middle Devonian corals from western New York (164811).

HILDEBRAND, Dr. S. F. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HILL, A. T., Lincoln, Nebr.: 4 Pawnee skulls, 2 without lower jaws, each from a different site in Nebraska (161390).

HINCKEL, CHARLES A., Managua, Nicaragua: 19 frogs from Managua (163792).

HOBBS, Dr. HORTON H., Jr., Gainesville, Fla.: A collection of crayfishes, comprising 13 types, 13 allotypes, and 13 paratypes of new species described in Dr. Hobbs's "Crayfishes of Florida" (164155).

HOFF, Dr. C. CLAYTON, Quincy, Ill.: 4 slides of a new species of ostracod representing holotype, allotype, and 2 paratypes (163912); 2 slides, holotype and allotype, of a new species of ostracod (164851); 10 slides of ostracods including holotype, allotype, and paratypes of 2 new species (165081).

HOGAN, JOHN R., Ardmore, Pa.: 60 pictorial photographs for exhibition during November 1942 (164058, loan); 6 pictorial photographs (164487).

HOLDEN, Mrs. RAYMOND T., Washington, D. C.: 4 terra-cotta pitchers, 1 bronze vase, and 1 bronze pedestal lamp excavated at Pompeii and presumably made by Greek colonists in Apulia, southern Italy, during the 4th century, collected by Capt. Lewis Herndon, U. S. N. (163674).

HOLDEN, Prof. ROY J., Blacksburg, Va.: (Through W. J. Stephenson): 6 specimens of cave limesand concretions from New River Cave, Montgomery County, Va. (163976).

HOLDRIDGE, LESLIE R., Port-au-Prince, Haiti: 401 Haitian plants (163691, 163968, 164247); 135 plants from Ecuador (165332, 165391).

HONESS, Dr. RALPH F., Laramie, Wyo.: 2 lungworms (163452).

HOPKINS MARINE STATION, Pacific Grove, Calif.: (Through Dr. Walter K. Fisher) 12 lots of hydrocorals and about 15 specimens of *Peripatus* (165335).

HORTON, F. W., Washington, D. C.: 2 scheelite ores from mines near Lucin, Utah, and Tucson, Ariz., 1 scheelite with pyrrhotite from Johansen mine, and 1 molybdenite ore from Pine Creek mine, Bishop, Calif. (164478); a collection of ores from various localities (23 specimens) (165229, exchange); a collection (66 specimens) largely of tungsten and aluminum ores from various localities (165470, exchange).

HOSAKA, EDWARD Y., Honolulu, Hawaii: 3 grasses from the Hawaiian Islands (164344).

HOTCHKISS, NEIL, Washington, D. C. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HOTKA, RAYMOND, Iowa City, Iowa: 2 beetles taken from bird stomachs (163322).

HOWELL, Prof. A. BRAZIER, Baltimore, Md.: 32 small mammals, collected in California, Canal Zone, and Germany (165371).

HRDLIČKA, Dr. ALEŠ, Washington, D. C.: 11 casts of Ancient Man and fossil apes obtained from various sources over a period of years and used for exhibit and study purposes (163546); a modern copy of Japanese print by Kiyonaga (163787); chipped blade found at an old village site at Point Hope, Alaska (164048); 3 Russian war posters (164567); 40 Russian anti-Nazi cartoons, 1 duplicate, 1 title page, all reproductions in offset lithography (164985). (See also under Col. Kermit Roosevelt.)

HUBBS, Prof. C. L. (See under University of Michigan, Museum of Zoology.)

HUBRICHT, LESLIE, St. Louis, Mo.: 30+ fresh-water amphipods from the United States, including cotypes of 3 new species (163472).

HUFFMAN, EARL C., Pasadena, Calif.: 183 mollusks from Mexico (165031).

HUGHES, Prof. R. CHESTER, Stillwater, Okla.: 8 slides bearing cotype specimens of parasitic worms (163432); 39 slides of helminths, representing 4 new species (164728).

HUHLEIN, Mrs. C. F., Louisville, Ky.: A wooden bitters cup, 4 miscellaneous pieces of glass, a child's porcelain tea set consisting of 20 pieces, a Meissen and a Cauldon ware cup and saucer (163850).

HULL, DENISON B., Chicago, Ill.: 1 Otarion hearing set (163660).

HUMES, Ensign ARTHUR G. (See under Dr. A. J. Tacquin.)

HUMPHRIES, Mrs. MAUREEN C., Victoria, British Columbia: Specimen of cattail down for upholstery purposes (163909).

HUNGERFORD, Prof. H. B. (See under University of Kansas.)

HURD, PETER, New York, N. Y.: 18 lithographs for special exhibition during February 1943 (164753, loan).

HUTCHINSON, ROBERT E., New York, N. Y.: 1 calendar printed by offset lithography containing 13 reproductions of historical prints of Washington, D. C. (164006).

HYMAN, Dr. LIBBIE H., New York, N. Y.: 1 slide of flatworm (165042).

IBARRA C., Dr. ÁNGEL, Cali, Colombia. (See under Escuela Superior de Agricultura Tropical.)

IDAHO, UNIVERSITY OF, *Southern Branch*, Pocatello, Idaho: (Through Prof. Ray J. Davis) Plant from Idaho (164033, exchange).

ILLINOIS STATE GEOLOGICAL SURVEY DIVISION, Urbana, Ill.: (Through Dr. Ralph E. Grim) 1 sample of halloysite from Eureka district, Utah (164537); 1 specimen of illite from Goose Lake area, Grundy County, Ill. (164832).

ILLINOIS STATE NATURAL HISTORY SURVEY DIVISION, Urbana, Ill.: (Through Dr. H. H. Ross) 219 specimens of mosquito larvae representing 18 species, all named (165312, exchange).

ILLINOIS, UNIVERSITY OF, Urbana, Ill. (Through Dr. George Neville Jones) 257 plants from Illinois (164607, exchange).

INGRAM, W. FRANK, Atlanta, Ga.: 1 star sapphire (316.85 carats), "Star of Artaban" (165469).

INSTITUTO DE CIENCIAS NATURALES, Bogotá, Colombia: (Through Dr. A. Dugand G.) 2,353 plants from Colombia (163395, 163430, 164099, 164211, 164345, 164749, 164762, 165080, exchanges); (through Francisco J. Otoya) 3 beetles collected in Colombia (164075).

INTERIOR, U. S. DEPARTMENT OF THE:

Bureau of Mines, Washington, D. C.: (Through Dr. Felix Chayes) 1 specimen of vanthoffite from Imperial County, northeast of Salton Sea, Calif. (164820).

Fish and Wildlife Service, Chicago, Ill.: (Through Paul E. Heye and Douglas E. Wade): 42 specimens of coyotes and dogs collected in Missouri (165202); 1 skeleton of the band-tailed pigeon and 1 syrinx of the Richardson's grouse (163795); 1,219 mammals transferred by the Fish and Wildlife Service and entered in the Museum catalog, Nos. 272343–273561, inclusive, between July 1, 1942, and June 15, 1943, not otherwise accessioned (165472); 7 amphibians and reptiles from Bogalusa, La., collected by J. C. Pearson on October 23, 1934 (165419); 27 sets of eggs of birds from Alaska (164130); 3 snakes from Florida (164660); 1 snowy owl, mounted (164118); 63 bird skins collected by Harry Malleis in Guatemala (163711); 29 lots of corals containing types of 6 species (163608); 1 Pacific loon (163597); 47 fishes, including 3 holotypes and 44 paratypes from various localities (163414); 2 skeletons of the scaled quail (163360); 334 plants (158775); (through O. Lloyd Meehean) 10+ amphipods, 65 crayfishes, 1 leech (155844); (through Isaac Ginsburg) 2 fishes, paratypes, from the Gulf of California (162975); (through Milton J. Lindner) a large collection of miscellaneous invertebrates, fishes, mollusks, echinoderms, and algae from the Gulf of Mexico (163260); (through John S. Dolley) 8 miscellaneous insects (163513); (through Dr. S. F. Hildebrand and Dr. Ira N. Gabrielson) 50,000 fishes from various localities (163614); (through Dr. Paul R. Needham) 30+ amphipods (163856); (through Dr. S. F. Hildebrand) 5 parasitic isopods from fishes (163803); (through Raymond J. Fleetwood) 1 pine mouse collected at the Piedmont National Wildlife Refuge, Round Oak, Ga. (163905); (through Fishery Technology Laboratory, Seattle, Wash.) a collection of

marine invertebrates and mollusks from the Alaska king-crab investigation (163923); (through Dr. Paul Galtsoff) 6 mollusks from San José, Guatemala (164070); (through Raymond J. Fleetwood) 1 shrew collected on the Piedmont National Wildlife Refuge, Round Oak, Ga., October 22, 1942, and 1 shrew collected at Round Oak, Ga., March 1943 (164079, 164974); (through Dr. Victor B. Scheffer) 10 pinniped and 8 porpoise skulls, collected by Dr. Scheffer and others (164834); (through Dr. John W. Aldrich) 6 Mexican hummingbirds (164875); (through David G. Frey) about 190 mollusks taken from the oyster bars of the Potomac River (164920); (through Neil Hotchkiss) 15 plants (165317).

Geological Survey: 1 small lot of extinct bird bones from the shoulder of Kaumaikehu above Pahala, Hawaii (92898); (through Jewell J. Glass) 1 specimen of the tin ore casiterite, from Cima, San Bernardino County, Calif. (164328); (through Dr. W. T. Schaller) 22 described mineral specimens from various localities (163646); (through Dr. T. B. Nolan) a specimen of tungsten ore from Tungstonia, White Pine, Nev., Vein No. 1, stope above lower adit: Mine of the Tungsten Metals, Inc. (164988); (through Dr. J. Bridge) 35 specimens of bauxite from 7 localities in Mississippi (163347); approximately 230 Pleistocene fossil mollusks from near Winston, N. Mex., collected by Mr. Jahns and Frank Rutledge (164674); 3 fossil marine mollusks dredged in the Vieques Passage, Puerto Rico, collected by Eugene Callaghan (163579); (through W. B. Lang) 1 specimen of bauxite from Washington mine near Irwinton, Wilkinson County, Ga. (163807); (through F. C. Calkins) a collection (307 specimens) of rocks and minerals from Cottonwood-American Fork area, Utah, described by F. C. Calkins and B. S. Butler (Geol. Surv. Prof. Paper 201) (164356); 1 specimen of tungsten ore from Gilmore Dome, 14 miles northeast of Fairbanks, Alaska, collected by Dr. J. B. Mertie, Jr. (164480).

National Park Service: (Through Thomas Boles) 1 fly and 1 shrew (164604); (through Edmund B. Rogers) 250 plants from Yellowstone National Park (164031); reconstructed pottery vessels and representative potsherds from Ocmulgee Basin, near Macon, Bibb County, Ga. (Smithsonian Institution share of material recovered since December 1933 through excavations sponsored by the Smithsonian Institution, the Society for Georgia Archeology, and the National Park Service and financed by CWA and WPA) (162907); 8 plants from Shenandoah National Park (165213); (through Edward D. Freeland) 15 plants from Shenandoah National Park (165374).

U. S. Antarctic Service: A collection of Antarctica rock specimens from southern Edsel Ford Range, Maric Byrd Land (164221).

IOWA, STATE UNIVERSITY OF, Iowa City, Iowa: 24 plants (164943, exchange).

IRVING, F. N., Washington, D. C.: 1 fern from Washington, D. C. (164365); 3 ferns from Florida and Georgia (165052).

ISRAEL, S. L., New York, N. Y.: 12 18th- and 19th-century Spanish, French, and Chinese antique, hand-painted, and lithographed paper and silk fans with staves of mother-of-pearl and ivory (158095).

JAHNS, R. H., Winston, N. Mex.: 1 specimen of microlite from Harding mine, Embudo, N. Mex. (164719).

JAMES, MAURICE T., Fort Collins, Colo.: 28 flies representing 9 species, 2 of them by 8 paratypes (163813); 6 flies representing 5 species, 4 of them by 5 paratypes (163957).

JARDÍN BOTÁNICO, Asunción, Paraguay: 70 grasses from Paraguay (163479).

JARDIN BOTANIQUE PRINCIPAL, Leningrad, U. S. S. R.: 76 plants (tropical American ferns) (113781, exchange).

JAUME, MIGUEL L., Habana, Cuba: 5 paratypes of mollusks from Cuba, 2 species (164146).

JELLISON, Maj. WM. L., Washington, D. C.: 350 miscellaneous insects collected by the donor in southern Yunnan at Yun Hsien, China (165304).

JENNINGS, CEDRIC C. (See under Rhode Island Department of Agriculture, Office of Entomology and Plant Industry.)

JERRO BROS., New York, N. Y. (Through William Skinner & Sons): 1 pair of slippers with uppers and decorations made from Skinner's satin (163631).

JOHNS-MANVILLE, Manville, N. J.: 3 samples of diatomaceous powders for use as filtering agents (164761).

JOHNSTON, FRANCIS N., Chevy Chase, Md.: About 2,000 specimens of Triassic fossils from New Pass Mountains, Lander County, Nev. (164129).

JOHNSTON, MARY E., Lisbon, Ohio: An all-white, homespun, cotton counterpane embroidered in "Tree of Life" grape-and-flower designs, dated May 8, 1822, and made on a plantation near Murfreesboro, Tenn., by Hetty Bradley, daughter of Maj. John Bradley of Revolutionary fame (163462).

JONES, ARTHUR W., University, Va.: Type of a tapeworm (165133); type of a cestode (165282).

JONES, Dr. GEORGE NEVILLE. (See under University of Illinois.)

JONES, S. E., Winter Haven, Tex.: 1 bat collected at Winter Haven (163654).

JONES, WILLIAM EVELYN (deceased): (Through Mrs. Barbara Hall) 2 porcelain vases and 2 porcelain plates from Capo di Monte molds, made at the Florence, Italy, factory of Marquis Ginori after 1821 (164704).

JOYNER, CALVIN, Washington, D. C.: 2 specimens of jade from Burma; 1 specimen of serpentine, Yunnan Province, China; 1 lot of water-worn pebbles of jade and 1 lot of hand-polished pebbles of jade from Hsinkiang Province (Chinese Turkestan), China (165230).

JUSTICE, U. S. DEPARTMENT OF, *Federal Bureau of Investigation:* Complete skeleton of a young adult male, probably of the White race, found near Bismarck, N. Dak. (165338).

KANSAS, UNIVERSITY OF, Lawrence, Kans.: 2 insect paratypes (164651); (through Prof. H. B. Hungerford) 16 insects, representing 6 species, all paratypes (163995, exchange); (through Prof. R. H. Beamer) 2 insect paratypes (164651).

KARST, ESTHER, Debruce, N. Y.: 1 transfer print on glass of a portrait of Maj. Gen. Zachary Taylor (163662).

KEARNEY, Dr. T. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry, and Dr. D. T. MacDougal.)

KEEN, Mrs. HERBERT B., New York City, N. Y.: Colored lithograph entitled "America's First Shot: The Sinking of the Submarine by the S. S. *Mongolia*, April 19, 1917," from the painting by A. F. Bishop (165345).

KEEN, Dr. MYRA, Stanford University, Calif.: 8 specimens of the pinnotherid crab from Monterey formation, Monterey, Calif. (164950).

KEEVER, CATHERINE, Stony Point, N. C.: 1 plant from North Carolina (163591).

KEITH, ARTHUR, Washington, D. C.: Collection of Paleozoic invertebrate fossils from Mount Guyot quadrangle, Va. (163870).

KELLY, Dr. W. A., East Lansing, Mich.: 89 Devonian fossils from Michigan (163358, 164327, 164720.)

KENT, HOBART, Geneva, N. Y.: 35 wood and linoleum cuts for special exhibition during November 1942 (164108, loan).

KENTUCKY, UNIVERSITY OF, Lexington, Ky.: (Through Dr. Paul O. Ritcher) 11 reared beetle larvae and 1 beetle (163469, 164295); 100 plants from Kentucky (164343, exchange); (through Dr. J. D. Figgins) 10 robins, 1 Savannah sparrow, and 11 grackles (162888, 164080, 165047, 165174); (through Prof. Frank T. McFarland) 300 plants from Kentucky (165145, exchange).

KEPHART, L. W., Takoma Park, Md.: 1 plant from Maryland (165401); (through Dr. S. F. Blake) 1 plant from Maryland (163516).

KERKAM, Maj. WILLIAM B., Jr., Westmoreland Hills, Md.: Gas-actuated machine rifle (164628).

KESSLER, F. C., Canon City, Colo.: 1 specimen of concretionary form of sandstone from the Dakota sandstone at Chandler, Colo. (164594).

KIDDE, WALTER, & Co., New York, N. Y.: 14 war posters (production incentives) (164560).

KIENER, Dr. WALTER, Lincoln, Nebr.: 140 plants from the western United States (163638).

KILLIP, E. P., Washington, D. C.: 515 plants from Colorado and California (163444). (See also under Smithsonian Institution, National Museum.)

KINDLE, Dr. CECIL H., New York, N. Y.: 25 Cambrian fossils from the Corner-of-the-Beach formation, Gaspé (164200).

KING, Lt. Col. W. V., Fort McPherson, Ga.: 41 mosquitoes (164102, exchange); 1 slide of the genitalia of a male *Culex atratus* (mosquito) from Boca Chica Key, Fla., the first record of the species from continental North America (164438).

KINZLEY, JUDD K., Wyckoff, N. J.: 2 beetles (161742).

KLEEREKOPER, HERMAN, Porto Alegre, Brazil: 4 aeglas, 3 crabs, 1 crayfish from Brazil (163373).

KLEIN, Dr. ROBERT L. (See under Stevens Institute of Technology.)

KNOWLTON, Dr. GEORGE F. (See under Utah State Agricultural College.)

KOCH, WALTER H., Salt Lake City, Utah: 1 specimen of crystallized epidote from Calumet mine, Salida, Colo. (164634, exchange); 1 specimen each of orpiment and realgar from Getchall mine near Golconda, Nev. (165368, exchange)

KOMP, Lt. Col. W. H. W., Ancon, Canal Zone: 6 specimens and 3 associated slides of mosquitoes (164234).

KOPEC, M. F., Grottoes, Va.: 1 parastitic worm (163420).

KOTO, Miss A. S., Beloit, Wis.: 24 mollusks from the Tortugas (164747).

KROGER GROCERY & BAKING Co. Cincinnati, Ohio: 4 war posters produced as a contribution to the war effort (164204).

KRUKOFF, B. A., New York, N. Y.: 7 wood samples (165144, exchange).

KRULL, Dr. WENDELL H. (See under U. S. Department of Agriculture, Bureau of Animal Industry.)

KUENZEL, JOHN G., Washington, D. C. (See under Navy Department, Bureau of Ships.)

KUNZEL, Rev. A. R., Benque Viejo, British Honduras: A small collection of insects and insect eggs from British Honduras (163735).

LADD, Dr. HARRY S. (See under Frank B. Lamb.)

LAKELA, Dr. OLGA, Duluth, Minn.: 2 plants (163982).

LAKESIDE PRESS, Chicago, Ill.: 1 reproduction in "Deeptone" of a letter written by Abraham Lincoln (164967); 1 example of "Deeptone" printing, a reproduction of a Currier & Ives lithograph, "Home to Thanksgiving" (165194).

LAMB, FRANK B., Chamberlain, S. Dak.: (Through Dr. Harry S. Ladd) Anterior half of fossil fish from Upper Cretaceous Pierre shale, South Dakota (164097).

LANE, M. C. (See under U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine.)

LANG, W. B. (See under U. S. Department of the Interior, Geological Survey.)

LANGFORD, DANIEL B., Honolulu, T. H.: 3 mollusks from near Palona Beach, Lourenco Marques, Mozambique (163821).

LARIVERS, Dr. IRA, Reno, Nev.: 1 beetle (164821).

LAUER, JULIUS, Baltimore, Md.: (Through War Department, U. S. Engineer Office): 5 German war medals of the period of World War I (164590).

LAURENCE, ROBERT A. (See under Tennessee Valley Authority.)

LAURENT, Mrs. SUZANNE, Washington, D. C.: 3 birds, including 2 zebra waxbills new to the collections (163718, 165143).

LAUSANNE, UNIVERSITY OF, Lausanne, Switzerland: 59 plants, duplicates and fragments (140767, exchange).

LAWS, B. W., Washington, D. C.: White steam automobile engine from car of 1910, model 00, rated 20 hp. (164014).

LAYTON, FLORENCE W., Washington, D. C.: Small canvas sampler embroidered in 1848 as a stint in needlework by the donor's mother, Julia Winona (Lacey) Layton (1840–1874), while attending St. Vincent's School at Washington, D. C. (164049).

LEECH, HUGH B., Vernon, British Columbia: 7 beetles, all paratypes (163862).

LEGG, W. C., Mount Lookout, W. Va.: Fern from West Virginia (165235).

LEIM, Dr. A. H., St. Andrews, New Brunswick: 5 amphipods from Somer's Brook, Moncton, New Brunswick, and Pugg Lake, Nova Scotia (159541); 3 isopods (165089).

LEON, Brother, Vedado-Habana, Cuba: 15 ferns from Cuba (163485).

LEONARD, E. C., Washington, D. C.: 298 plants mostly from Maryland (165320).

LEWIS, C. BERNARD, Kingston, Jamaica, B. W. I.: A collection of miscellaneous insects and 4 isopods collected on the Pedro and Morant Cays by the donor (165211).

LEYVA, CARLOS J., Oaxaca, Mexico: 2 plants from Mexico (164008, 165036).

LIBERTY MUTUAL INSURANCE Co., Boston, Mass.: 1 war poster (164545).

LINCICOME, Prof. DAVID RICHARD, Lexington, Ky.: 2 slides of parasitic worms, paratypes (163356).

LINDNER, MILTON J., New Orleans, La. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

LINNEAN SOCIETY OF LONDON, London, England: (Through Dr. E. D. Merrill) 46 photographs of specimens in the Linnean Herbarium (164608).

LIPOVSKY, LOUIS J., Barberton, Ohio: 28 flies, 2 pinned adults, 2 slides with 2 and 14 larvae, respectively, 1 vial (alcohol with 10 larvae) and 8 photographs of larvae (164233).

LISSIM, SIMON, New York, N. Y.: 1 color print of a patriotic subject demonstrating the combination of six stencil printings and one offset lithographic printing; this print served as frontispiece to Mr. Lissim's catalog in his special exhibition of paintings and designs (164823).

LITTLE, Dr. ELBERT L. (See under U. S. Department of Agriculture, Forest Service.)

LITTLEHALES, BATES, Washington, D. C.: 40+ amphipods from Frenchman Bay, Maine (163688).

LOGUE, L. L. (See under Merrill W. Haas.)

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE, London, England: (Through Dr. W. B. Wigglesworth) 44 mosquitoes, representing 11 species by larvae and adults (165346).

LOOMIS, H. F., Coconut Grove, Fla.: 1 type of milliped collected by Cook and Loomis in Kuling, Kiangsi, China, October 17, 1919 (164432). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)

LORD, Mrs. WILLIAM H., Asheville, N. C.: 16 negatives of Plains Indians made in 1900 by William H. Lord on the Crow Reservation, southern Montana (163987); beaded shoulder bag from the Chippewa Indians of northern Wisconsin (164095).

LOS ANGELES MUSEUM OF HISTORY, SCIENCE, AND ART, Los Angeles, Calif: Plaster duplicate of fossil horse skull (164510).

LOUISIANA STATE DEPARTMENT OF CONSERVATION, New Orleans, La.: 4 parasitic beetles taken from beaver in Louisiana (164263).

LOVE, Maj. HENRY K., Kensington, Md.: Shrunken human adult head purchased by donor in Quito, Ecuador, in 1931 or 1932 (163470).

LOVERING, Dr. T. S., Kremling, Colo.: 2 sphalerite specimens from Big Four mine near Kremling (164367).

LUNDELL, Dr. C. L., Ann Arbor, Mich. (See under University of Michigan.)

LUNSFORD, JOHN E., Atlanta, Ga.: 1 5×7 color plate of William Jennings Bryan's home at Coconut Grove, Fla., in the fall of 1925 (163406).

LUNZ, G. ROBERT, Jr., Charleston, S. C.: 4 lots of amphipods, 1 shrimp, 1 lot of pycnogonids (144312). (See also under Charleston Museum.)

MACARTHUR, Mrs. W. E., Jacksonville, Fla.: 2 plants from Florida (163331, 164559).

MACDOUGAL, Dr. D. T., Carmel, Calif.: (Through Dr. T. H. Kearney) 2 plants from Arizona (164512).

MACFADDEN, Mrs. FAY A., Boise, Idaho: 31 plants from Idaho (164157).

MACGINITIE, Prof. G. E., Corona Del Mar, Calif.: A collection of Crustacea (about 170 specimens) from the west coast of America (163372).

MAHIN, CHARLES, Pacific Grove, Calif.: 7 European mollusks from California (165343).

MARBLE, Dr. JOHN PUTNAM, Chevy Chase, Md.: 1 specimen of thortveitite from a dyke on the Eptevann farm, Iveland District, Norway (164386); 3 allanite specimens from Essex County, N. Y., and Quebec, Canada (165041).

MARSHALL, ERNEST B., Washington, D. C.: 8 mammal skulls, including 5 gray fox, 1 opossum, 1 muskrat, and 1 weasel, collected near Laurel, Md. (163842); 4 opossums, 2 muskrats, and 1 skunk, collected by donor at Laurel, Md., in December 1942 and January 1943 (164876).

MARTIN, JOEL, Delray Beach, Fla.: 13+ hippas and 3 amphipods from Delray Beach (163459, 163645).

MARTIN, TERRY, Staten Island, N. Y.: 2 carved and painted medicineman canes recently collected by donor's father from the San Blas Indians, southeastern Panama (165348).

MARTÍNEZ, Dr. MAXIMINO, Mexico, D. F.: 4 plants from Mexico (163172, 163407).

MARYLAND ACADEMY OF SCIENCES, Baltimore, Md.: 1 plant from Maryland (165375).

MASTER, LEO A., Washington, D. C.: A 200-watt electric lamp, about 1907, marked "Edison Mazda a 8 175 206," 9½" long, 5" in diameter, brass base (163723).

MATHESON, Prof. ROBERT. (See under Cornell University.)

MATTHEWS, RANSOM, Los Angeles, Calif.: 11 pieces of historical motion-picture film from Earl Thiesen collection (163405); a piece of rubber-tire filler made by the National Rubber Tire Filler Co. about 1920 (163437).

MATUDA, E., Chiapas, Mexico: 71 plants from Mexico (165445).

MAWHINNEY, ARTHUR S., New York, N. Y.: 8 dog portraits of celebrated breeds (163788).

MAXWELL, Mrs. MARIE B., Exeter, N. H.: A catlinite calumet pipe from the Blackfeet, presented in the name of the donor's husband, Clifford D. Maxwell, and originally presented in 1893 to Charles A. Maxwell, his father (165046).

MAXWELL, MARY E., Washington, D. C.: 9 pieces of antique jewelry and 8 commemorative medals collected by donor in the course of her travels (165333).

MCATEE, W. L., Chicago, Ill.: 7 flies, representing 6 species, all types (163899).

MCBEY, JAMES, New York, N. Y.: 35 etchings for special exhibition during April 1943 (165053, loan).

MCBRIDE, H. A., Washington, D. C.: 2 fishes from Liberia, collected by donor (163017).

MCBURNEY, JOHN W. (See under Joseph Ulmer.)

MCCLAIN, J. A., Jr., St. Louis, Mo.: A small collection of beetle larvae col-

lected in St. Louis, Mo., from fence made of timber from Michigan (163763).

McCLAMMY, W. C., Wilmington, N. C.: Irish one-penny token struck in 1820 (163886).

McCLURE, Dr. F. A., Chevy Chase, Md.: Specimens of the woody vine Lak Tong, from Kwangtung Province, China (165247).

McDANIEL, STEPHEN B., Baltimore, Md.: A Staffordshire stoneware plate with paneled painting of the burning of the New York Stock Exchange in 1835 (163919).

McDUNNOUGH, Dr. J., Ottawa, Canada. (See under Canadian Government, Department of Agriculture.)

McFADDEN, Mrs. E. G., Alexandria, Va.: Bordered, cotton applique quilt with an original, all-over, naturalistic pattern of applied flower, bird, butterfly, and vase motifs, cut from large-patterned, polychrome-printed chintz, made during the early 1800's at Charleston, S. C., by Susan Ladson McPherson, great-grandmother of the donor (165195).

McFARLAND, Prof. FRANK T., Lexington, Ky. (See under University of Kentucky.)

McGREGOR, E. A., Whittier, Calif.: 1 type slide of a new spider mite (165083).

McINTOSH, WILLIAM B. (See under G. M. Badger, Jr.)

McKIM, Mrs. W. DUNCAN, Washington, D. C.: 28 specimens consisting of decorated porcelain bearing the mark of Thieme, Dresden, Germany; a French bagpipe, miniature figurines, and baskets from Mexico; an ancient Chinese bronze mirror; a Japanese sword guard; and miscellaneous items of Swedish folk art (164201).

McLEAN, Mrs. MARION J., Washington, D. C.: An old linen sampler with alphabets, verses, flower designs, and vine and saw-tooth borders, worked in eyelet, chain, satin, and cross-stitch embroidery by Nancy Batchelder, aged 12 (164484).

McPHERSON, H. R., Columbus, Ohio: 1 bone (pelvis) of the little brown crane (165025).

McVAUGH, Dr. ROGERS. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

MEAD, Hon. JAMES M., Washington, D. C. (See under Mrs. Helen Slater Ramsay.)

MEDLAR, W. P. (See under Natural History Museum, San Diego, Calif.)

MEEHEAN, O. LLOYD, Welaka, Fla. (See under U. S. Department of the Interior. Fish and Wildlife Service.)

MEES, C. E. K., Rochester, N. Y. (See under Eastman Kodak Co.)

MENGES, C. (See under Clarence H. Alexander.)

MERCK & Co., INC., Rahway, N. J.: An exhibit of the original American synthesis of Vitamin B_1 (according to Williams, Buchman, and Cline) illustrating chemical transitional steps from molecule to molecule by means of atom models (163634).

MERRILL, Dr. E. D., Cambridge, Mass. (See under Linnean Society of London.)

METROPOLITAN CAMERA CLUB COUNCIL, Long Island, N. Y.: 100 pictorial photographs, 7th annual travel salon exhibited January 1943 (164568, loan).

METROPOLITAN LIFE INSURANCE CO., New York, N. Y.: 19 health placards illustrating dangerous diseases and vital statistics, for addition to the section of public health (164050); 9 war posters (National Nutrition Campaign) (164546).

MEYER, Dr. MARVIN C., New Brunswick, N. J.: A collection of leeches (163865, deposit).

MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich.: 139 plants from British Honduras (157551, 164779, exchanges); 711 plants (161398, 164656, exchanges); 577 plants from Mexico (163455, 164850, exchanges); 31 plants from Texas (164215, 164241, exchanges); (through Dr. C. L. Lundell) 421 plants from Texas (164680, exchange); (through Prof. H. H. Bartlett) 223 plants from Haiti (163670, exchange);

Museum of Paleontology: Model restorations of 2 fossil reptiles (163884, exchange); a collection of topotypes of Devonian Bryozoa from the Traverse formation of Michigan (164874, exchange).

Museum of Zoology: (Through Dr. C. L. Hubbs) 9 fishes collected by H. A. Carter in Georgia in 1941–42 (163839, exchange).

MIDDLEKAUFF, Capt. WOODROW W., Fort McPherson, Ga. (See under War Department Laboratory, Fourth Service Command.)

MILES, CECIL, Mariquita, Colombia: 54 fishes from Colombia. (164486, 165341). (See also under Escuela Superior de Agricultura Tropical.)

MILLE, Rev. Father LUIS, Manabí, Ecuador: 5 plants from Ecuador (165148).

MILLER, GERRIT S., Jr., Washington, D. C.: 1 mole collected by donor at Sandgate, Vt., July 19, 1942 (164878).

MILLER, Mrs. HELEN, New York, N. Y.: 27 etchings and 7 drawings for

special exhibition during March 1943 (164881, loan).

MILLER, Dr. ROBERT C. (See under California Academy of Sciences.)

MILWAUKEE PUBLIC MUSEUM, Milwaukee, Wis.: (Through W. E. Dickinson) 2 Lepidoptera (162519).

MINNESOTA, UNIVERSITY OF, Minneapolis, Minn.: 203 plants, mostly from Minnesota (165234, exchange).

MISSISSIPPI GAME AND FISH COMMISSION, Jackson, Miss.: (Through Fannye A. Cook) 1 wormsnake from Chickasaw County, Miss. (163473); 3 turtles from Mississippi (164149).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 1,754 plants from Panama and the Western United States (163380, 163381, 163636, 163844, 164339, 164373, 165390, exchanges).

MITTLEMAN, M. B., Brooklyn, N. Y.: 9 small mammals and 1 owl collected in Indiana (163755, 164098).

MOECK, ARTHUR H., Milwaukee, Wis.: 10 Lepidoptera (163064).

MOLDENKE, Dr. HAROLD N., New York, N. Y.: 28 grasses from the Western United States (164502, 164524, 164635).

MONNING, OSCAR E., Fort Worth, Tex.: 1 slice of the Somerville County, Tex., pallasite (164409, exchange).

MONSANTO CHEMICAL CO., St. Louis Mo.: 1 "Saflex" plastic raincoat made of cloth coated with vinyl acetal safety glass plastic, a substitute in this application for rubber (165003).

MONTGOMERY, ARTHUR, New York, N. Y.: 3 specimens of microlite from the Harding mine, Embudo, N. Mex.: (164333, 164718).

MOORE, Dr. RILEY D., Washington, D. C.: A druggist's oil bottle with lipped stopper for pouring heavy oil and a cap to protect the stopper from dust (164056). (See also under Dr. Hugh M. Fraser.)

MORITZ, Dr. C. E., Washington, D. C.: 18 mollusks, representing 5 species from Puerto Rico, and 2 isopods (163822, 163855).

MORRISON, B. Y. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

MORTON, C. V., Washington, D. C.: 450 plants from Eastern United States (164679).

MUESEBECK, C. F. W. (See under U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine.)

MURPHY, Dr. R. C. (See under American Museum of Natural History.)

MURRAY, DONALD M., Co., INC., New York, N. Y.: 28 specimens of tourmaline, quartz, and other minerals from Minas Geraës and Bahia, Brazil, and 1 quartz specimen from Trinidad (164326).

MURRAY, WHITEMARSH A., Washington, D. C.: 1 pair of beaded doeskin moccasins originally presented by a Modoc Indian to Americus Davis, grandfather of the donor (164586).

MUSEO DE LA PLATA, La Plata, Argentina: (Through Dr. Ángel L. Cabrera) 41 plants from Argentina (163471, exchange).

MUSGRAVE, M. E.: (Through Ernest P. Walker) 1 shrew collected at Columbine Cottage, near Alpine, Ariz., 1942 (163979).

MUSGRAVE, PAUL N., Huntington, W. Va.: 9 beetles from the Philippine Islands (164303); 6 dipterous larvae (164396); a small collection of insects, including 2 larvae (164830); 1 water mite collected in West Virginia (165074).

NAGY, STEPHEN, Washington, D. C.: Gregorian type telescope made by Dolland, London, said to date from about 1732 (164348, loan).

NAIRN, JOHN J., Cimarron, N. Mex.: 1 Hudsonian godwit (163173).

NATIONAL ASSOCIATION OF WOMEN ARTISTS, INC., New York, N. Y.: 35 prints comprising the traveling exhibition of prints by the Association for special exhibition, June 1 to 27, 1942 (165380, loan).

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: Original painting of a comet passing the Washington Monument, by Charles Bittinger, National Geographic Magazine, July 1939 (164857, loan); (through Maj. Gen. A. M. Patch) fishes, mollusks, marine invertebrates, insects, echinoderms, reptiles, mammal, from the Island of New Caledonia, South Pacific (165280).

NATIONAL LIVESTOCK AND MEAT BOARD, Chicago, Ill.: A collection of specimens illustrating the subject of nutrition and health (165306).

NATIONAL PROCESS CO., INC., New York, N. Y.: 12 war posters (6 subjects with duplicates), 1 copy of magazine *Steel Horizons*, 1 lithographed portrait of General MacArthur, and 4 lithographs of battleships (2 subjects with duplicates) (163800); 1 photomechanical reproduction in offset lithography of a water color, "Diamond Head, Hawaii," by Fred J. Hoertz (164588).

NATIONAL SPELEOLOGICAL SOCIETY, Washington, D. C.: 2 bats, collected by Don Black at Maryville College Campus, Tenn., on June 19, 1942 (163498); (through W. J. Stephenson) 1 bat collected by the Society in Tony's

Cave near Blacksburg, Va., September 9, 1942 (163981); 1 fish from Torey Cave, near Blacksburg, Va. (164035).

NATURAL HISTORY MUSEUM, San Diego, Calif.: (Through W. P. Medlar) 2 moths, both paratypes (163873).

NAVY DEPARTMENT, U. S.: 1 war poster and 1 duplicate (164835); (through Lt. Robert L. Parsons) 31 photographs, "Our Navy in Action," exhibited in foyer of Natural History Building of the National Museum during April 1943 (165110, loan).

Bureau of Ships: A collection of barnacles from a ship operating off the coast of Colombia (163527); wood samples of angelino, balsamo, caoba, and jabillo from Venezuela (163858); wood samples of cuipo from Canal Zone (164254); wood specimens of balsa, Spanish cedar, and moho from Guatemala and light-weight tupelo gum from Louisiana (165447); (through John Kuenzel) wood sample of barriguda from Brazil (163501); samples of 3 woods from Yaracuy Province, Venezuela (163533).

Incentive Division: 5 war posters (industrial incentives) (164870).

Naval Research Laboratory: (Through Dr. Samuel E. Pond) Approximately 470 marine mollusks and a test plate with incrustations from Beaufort, N. C., and 1 vial of barnacles from Woods Hole, Mass. (163435).

Recruiting Bureau, White Plains, N. Y.: 6 Navy recruiting posters (163599).

NEBRASKA, UNIVERSITY OF, *Department of Botany*, Lincoln, Nebr.: (Through Prof. Elda R. Walker) 1 plant from Nebraska (164158).

NEEDHAM, Dr. PAUL R. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

NELSON, Prof. AVEN. (See under University of Wyoming.)

NELSON, ELIAS, Yakima, Wash.: 1 plant from Washington (164212).

NETTING, M. GRAHAM. (See under Carnegie Museum.)

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 1,546 plants from Bolivia, New Guinea, and Florida (161966, 165168, 165218, exchanges).

NEW YORK STATE COLLEGE OF FORESTRY, Syracuse, N. Y.: 63 woody plants (163397, exchange).

NEW YORK STATE MUSEUM, Albany, N. Y.: 95 plants from New York (164955, exchange).

NEWCOMBE, Dr. CURTIS L., Williamsburg, Va.: 3 crabs from Queens Creek, Va. (165183).

NICHOLS, JOHN T. (See under American Museum of Natural History.)

NICOLAY, ALAN S., Upper Montclair, N. J.: 33 beetles (164724).

NOLAN, Dr. T. B., Washington, D. C. (See under U. S. Department of the Interior, Geological Survey.)

NORRIS, ROBERT, Tifton, Ga.: 9 bird skins (164810).

NORTH AMERICAN AVIATION, INC., Inglewood, Calif.: 1 war poster and 1 duplicate (164814).

NORTON CO., Worcester, Mass.: An exhibit of abrasive products showing the manufacture and use of manufactured abrasives, 178 specimens (162775).

NUTTING, GEORGE HALE, Seattle, Wash.: 1 bookplate (165043).

OBERLIN COLLEGE, Oberlin, Ohio: 60 plants from Florida and Ohio (164944, exchange).

OEHLER, CHARLES, Cincinnati, Ohio: 9 beetles (159788).

OFFICE OF WAR INFORMATION, *Bureau of Publications and Graphics*, Washington, D. C.: 11 war posters and duplicates (164595, 164824, 165236).

OGLE, Mrs. DORA G. (See under Josepha Whitney.)

O'HARA, Mrs. MAYFRED L., Waltham, Mass.: 2 basketry hats of the Bontok-Igorot, obtained by donor at the Seattle Exposition in 1909 (164912).

O'LEARY, Father A. (See under Georgetown University.)

OLMSTED, Dr. A. J., Washington, D. C.: 2 Mediobrome prints by Misonne, "Paysage" and "Village Flamand" (165248).

OPTICAL RESEARCH, INC., Long Island City, N. Y.: 1 set of 15 contact lenses, with a glass corneal central section and a plastic scleral rim, and 1 set of 12 contact lenses made entirely of transparent plastic (plexiglas), for addition to the collection of ophthalmic lenses (164336).

OSBORN MANUFACTURING CO., Cleveland, Ohio: (Through M. C. Pecsok) A double exhibition panel containing 72 industrial brushes, photographs, and labels, telling the story of power-driven brushes used in industry (84 specimens) (164984).

OSMENT, Capt. WILLIAM, Hollywood, Fla.: 5 shells from Florida (164178).

OTOYA, Dr. FRANCISCO J., Bogotá, Colombia: 46 scarabaeid beetles from Colombia (164945). (See also under Instituto de Ciencias Naturales.)

OUTDOOR ADVERTISING INCORPORATED, New York, N. Y.: 10 billboard war posters (miniature) (164237).

PACKARD, RALPH G., Morristown, N. J.: Collection of firearms, swords, and daggers, illustrating the history of such weapons from the 15th to the 20th century, 228 specimens (164794).

PALMER, Mrs. DOROTHY K., Habana, Cuba: Collection of Tertiary Foraminifera and Echinoidea from Camagüey Province, Cuba (163580).

PALMER, Dr. T. S., Washington, D. C.: 1 bat collected in Washington, D. C., by donor January 2, 1943 (164879).

PANAMA CANAL, THE, Ancon, Canal Zone: (Through Dr. R. La T. Cavenaugh) 1 helminth from a cockroach (164242).

PAN AMERICAN SANITARY BUREAU, Washington, D. C.: 4 small rodents collected in the endemic plague area in the Province of Tomina, Department of Chuquisaca, Bolivia (164144).

PARKE, DAVIS & Co., Detroit, Mich.: A set of 12 8" × 10" glossy photographic prints with which to illustrate the subject of "Making Typhus Vaccine for the Army" (164335); a specimen of typhus vaccine for the section of pharmacy (165004).

PARODI, Dr. L. R., Buenos Aires, Argentina: 10 grasses (163394).

PARSONS, Lt. ROBERT, Washington, D. C. (See under Navy Department.)

PATCH, Maj. Gen. A. M., Fort Lewis, Wash.: Ceremonial club of serpentine (native *o kono*) originally presented to donor by Henri Naisseline, grand chief of Maré, the southernmost of the Loyalty Islands (165437). (See also under National Geographic Society.)

PATE, V. S. L. (See under Cornell University.)

PAYNE, Mrs. ELIZABETH M., Washington, D. C.: 1 string of cylindrical and discoidal stone beads and jadeite "tiger" head pendant found on the Bay Islands or adjacent mainland of Honduras by A. W. Payne (164813).

PEARSE, Dr. A. S., Durham, N. C. (See under Donald P. Gordon.)

PECK, Dr. RAYMOND E., Columbia, Mo.: Paratypes of 22 species of Lower Cretaceous crinoids from Texas (163468).

PECSOK, M. C., Cleveland, Ohio. (See under Osborn Manufacturing Co.).

PEDERSEN, ELMER O., South Bend, Wash.: (Through Dr. Kelshaw Bonham) 2 sharks' teeth collected by donor August 28, 1936, in Willapa Bay, Wash., near North River (163016).

PENNAK, Prof. ROBERT W., Boulder, Colo.: 2 slides of Mystacocarida (Crustacea) representing a new order (164124).

PERKINS, JOHN U., Washington, D. C.: "Solograph" stereo camera, 2 R. R. lenses, and 3 plateholders (163438).

PERRY, Dr. STUART H., Adrian, Mich.: 1 individual meteorite of the Modoc, Kans., fall (4,640 grams) (164387).

PETERS, JAMES L., Cambridge, Mass. (See under Harvard University, Museum of Comparative Zoology.)

PETRIDES, GEORGE, Washington, D. C.: 1 horned grebe collected near Fairfax Court House, Fairfax County, Va. (164677).

PFAUDLER, Co., Rochester, N. Y.: 1 section of 2-inch iron pipe enameled inside with resistant glass (164689).

PHAIR, A. W. A., Lillooet, British Columbia: Small collection of miscellaneous insects from British Columbia. (159890).

PHILADELPHIA CHILD HEALTH SOCIETY, Philadelphia, Pa.: 1 set of 8 "Vegetables for Victory" charts for the diet exhibit of the Section of Public Health (163306); 12 8½" × 10¼" food value charts for use in the diet exhibit of the Section of Public Health (164593).

PHILADELPHIA ZOOLOGICAL GARDEN, Philadelphia, Pa.: (Through Freeman M. Shelly) 1 elephant skeleton (164910).

PHILIPPI, R. A., Santiago, Chile: 14 skins of Chilean sparrow (164389).

PHOENIX TRIMMING Co., Chicago, Ill.: 1 specimen each of cotton and Nylon webbing used in the "harness" connecting the aviator to his parachute (163630).

PIGMAN, G. R., New York, N. Y.: 66 pictorial photographs for special exhibition March 1 to 28, 1943 (164861, loan).

PILSBRY, Dr. H. A. (See under Academy of Natural Sciences of Philadelphia.)

PIRNIE, MALCOLM, Jr., Whitehorse, Yukon. (See under Federal Security Agency.)

PITTIER, Dr. H., Caracas, Venezuela: 729 plants from Venezuela (163864, 164290, 165264).

PITTSBURGH STEAMSHIP Co., Cleveland, Ohio: Plans of Great Lakes steamships, the whaleback steamer *Samuel Mather*, 1892, and the steamship *A. H. Ferbert*, 1941; 10 prints (163402).

POLYGRAPHIC Co. OF AMERICA, New York, N. Y.: 1 war poster (163785).

POND, Dr. SAMUEL E., Washington, D. C. (See under Navy Department, Naval Research Laboratory.)

POND, WALTER F., Nashville, Tenn.: 2 specimens of coral from the Ordovi-

cian of northwest Smith County, Tenn. (165259).

PONTON, G. M., St. Augustine, Fla.: (Through Dr. C. Wythe Cooke). About 43 Tertiary echinoids and 1 Tertiary mollusk from the Taylor County rock pit near Mayo, Suwannee County, Fla. (165019).

POPULAR PHOTOGRAPHY, Chicago, Ill.: 99 salon prints: 4th annual salon of prize winners (165219, loan).

PORTER, Dr. CARLOS E., Santiago, Chile: 2 Crustacea from Chile (159683); 1 mollusk, 1 hermit crab, and 23 insects (163115).

POST OFFICE DEPARTMENT, U. S.: 7 sets of specimen stamps, 779 specimens, received from the International Bureau and described in the bulletins of that Bureau (163992, 164219, 164503, 164663); 3 copies of each of the following U. S. postage stamps: 3-cent Kentucky Statehood commemorative stamp; 3-cent Win-the-War stamp, 5-cent China commemorative stamp, 9 specimens (163565); postage stamps of Ceylon, the Bahamas, Nyasaland, Gibraltar, and the United Kingdom, 8 specimens (164707); 3 copies of the United Nations 2-cent commemorative postage stamp (164862); 7 postage stamps of the Soviet Union (164938); 3 1-cent Four Freedoms commemorative stamps (164979); 2 Soviet 30-kopek postage stamps—"All for War"—"All for Victory" and "Partisans" (165007); 1 specimen each of the following stamps: Newfoundland, 30 cents; Tonga Island, 2s6d and 5s; Cyprus, 1½ piastre; Malta, ½d, 1d, 1½d, 2d, 2½d, and 3d (165117); 1 specimen each of the following postage stamps received from the Government of Yugoslavia in London: Royal Commemorative (March 27, 1941–1943), 2, 3, 5, and 10 dinars (165122); 1 Soviet 5-kopek stamp, "Industrialization," commemorating 25th anniversary of Russian October Revolution (165270); Soviet 45-kopek postage stamp of the War Series (165339).

POTOMAC APPALACHIAN TRAIL CLUB, Washington, D. C.: 204 trail photographs for special exhibition during March 1943 (164915, loan).

POTTER, W. B., Fullerton, Calif.: Glass token of the presidential campaign of 1840 (165241).

POWELL, Prof. THOMAS E., Elon College, N. C. (See Carolina Biological Supply Co.)

PRICE, JOHN W., Lancaster, Pa.: 10+ amphipods and 1 isopod from a stream at Bellevue, Pa. (164714).

PRINCETON MUSEUM OF ZOOLOGY, Princeton, N. J.: Type specimen of bird (164527, exchange).

PROCTOR, GEORGE R., Marietta, Ohio: Fern from Ohio (164100).

PUFFER, CLARENCE C., West Bridgewater, Mass.: 314 mollusks from Florida (165425).

RALEIGH, B. JEAN, Washington, D. C.: 2 cups and 3 saucers of late 19th century hard paste porcelain, made in Copenhagen, Denmark (164073).

RAMSAY, Mrs. HELEN SLATER, Dalton, N. Y.: (Through Hon. James M. Mead) Pair of knee buckles worn by Sir Richard Nichols (165417).

RANCHO SANTA ANA BOTANIC GARDEN, Anaheim, Calif.: (Through Dr. Carl B. Wolf) 3 plants from California (164657, exchange).

RANEY, EDWARD, Ithaca, N. Y.: 20 crayfishes, 28 fresh-water mollusks, and 4 vials of insects (164384).

RAPP, F. A., Washington, D. C.: Collection of minerals from Amelia, Va. (164372, exchange).

RAPP, WILLIAM F., Jr., Chatham, N. J.: 4 small mammals collected at Chatham (163859); 23 beetles (164055).

RASETTI, Dr. FRANCO, Quebec, Quebec: 59 Cambrian and Canadian fossils from Levis, Quebec (164479); 10 brachiopods and 22 trilobites from the Levis conglomerate and 26 specimens of Lower Cambrian trilobites and 2 casts of types from east of Levis (165021).

RAYNOLDS, EDWARD F., Central Valley, N. Y.: 61 pictorial photographs for special exhibition during June 1943 (165273, loan).

R. C. A. MANUFACTURING Co., Camden, N. J.: 16 war posters, "Beat the Promise" (164349).

READING Co., Philadelphia, Pa.: (Through I. L. Gordon) 1 girder from an iron-truss railroad bridge designed, built, and erected by the Philadelphia & Reading Railroad in 1845 (164162).

REED, Dr. S. ALBERT (deceased), Locust, N. J.: (Through Latham G. Reed) The first full-size Reed propeller, D–1, made under Dr. Reed's direction and successfully tested in flight August 30, 1921 (163229).

REED, LATHAM G. (See under Dr. S. Albert Reed.)

REHBERGER, A. C., Chicago, Ill.: A commercial model of Douglas DC–3 (c. 1937–1942) transport plane marked "Super Mainliner" "United Air Lines" mounted on a gray metal

base with map of the United States (164133).

REHN, Dr. E. E., Columbus, Ohio: 175 early Devonian fossils from the Huntersville chert of West Virginia and Virginia (163197).

REHN, J. A. G. (See under Academy of Natural Sciences of Philadelphia.)

REID, EARL D., Washington, D. C. (Specimens collected jointly with Master James B. Schultz): 67 sharks' teeth collected by donors at Randall Cliffs and Scientists' Cliffs, Md. (165109).

REINHARD, Dr. E. G., Washington, D. C.: 29 amphipods from Frenchman Bay, Maine (163371).

REINOSKY, FRANK, Rampart, Alaska: 1 dorsal vertebra of mammal from Rampart (163610).

RESSER, Dr. C. E. (See under Smithsonian Institution, National Museum.)

REVENUE CAMERA CLUB, Washington, D. C.: 60 salon prints, exhibited August 1942 (163549, loan).

RHOADES, WILLIAM, Indianapolis, Ind.: 5 Paleozoic corals from the Ohio Valley (163935, exchange).

RHODE ISLAND DEPARTMENT OF AGRICULTURE, *Office of Entomology and Plant Industry*, Kingston, R. I.: (Through Cedric C. Jennings) 5 beetles (163648).

RHOKANA CORPORATION, LTD., Kitwe, Northern Rhodesia: 1 lot of carrollite from Rhokana, Northern Rhodesia (165253).

RICHARDS, DONALD, Chicago, Ill.: 22 mosses from Plummers Island, Md. (164347).

RICHARDSON, Mr. (address unknown): 3 multiple tubular wick lighthouse lanterns of brass and steel in use about 1860 (164954).

RICKARD, JOHN G., Atlantic City, N. J.: Bronze half-anna piece of India, struck in 1942 (163825).

RIGGS, WILLIAM A., Little Rock, Ark.: 2 specimens of cinnabar ore with dickite from U. S. Mercury Co.'s mine, Pike County, Ark. (163429).

RILEY, J. H. (deceased). (See under Smithsonian Institution, National Museum.)

RITCHER, Dr. PAUL O. (See under University of Kentucky.)

ROBERTS, Prof. J. H., University, La.: 14 miscellaneous insects (164533).

ROCHESTER, UNIVERSITY OF, *Biological Laboratories*, Rochester, N. Y.: (Through Dr. Richard H. Goodwin) 20 plants from New York (163529, exchange); 21 plants from New Mexico (165441, exchange).

ROEBLING FUND, Smithsonian Institution: 2 tektite specimens from Georgia (158576); a group of pyrolusite crystals from Boston Hill mine, near Silver City, N. Mex. (163036); 9 meteorites: Abernathy and Sanderson, Tex.; Atlanta, La.; Aurora, N. Mex.; Hardwick, Minn.; and Brewster, Garnett, and Otis, Kans.; and Indianola, Nebr. (164199); 1 specimen of Harrisonville, Mo., meteorite (163368); 1 aquamarine crystal from Spitskopje, Africa (163412); a specimen of nephrite from Lander, Wyo., and one of fergusonite from Suppington, Mont., and 9 other minerals (163457); 1 large crystal of scheelite from Moctezuma, Sonora (163560); 1 specimen each of apophyllite, analcite, and heulandite from Benton County, Oreg. (163860); 2 aphrosiderite pseudomorphs after almandite and a good matrix specimen from Michigan (164584); 1 specimen of cinnabar crystals from Jefferson County, Oreg. (164585); 1 block of "bird's eye" quartz from Roseburg, Oreg. (164815); a specimen of sahlinite from Sweden and one of ardealite from Transylvania, Rumania (165431); 9 chrysoberyl crystals from near Collintina, Esperito Santo, Brazil, 1 phenacite group from Paricicíaba, Minas Geraes, Brazil, and 1 tourmaline crystallized group from Figueira, Minas Geraes (165468).

ROGERS, EDMUND B. (See under U. S. Department of the Interior, National Park Service.)

ROGERS, KELLOGG, STILLSON, INC., New York, N. Y.: 4 war posters used as war production incentives (164135).

ROHRER, W. M., Washington, D. C.: 1 catbird, 1 woodthrush (165193).

ROOSEVELT, Col. KERMIT, Oyster Bay, N. Y.: (Through Dr. Aleš Hrdlička) Eskimo artifacts collected near Nome, Alaska (164684).

ROSE, Corporal ALEXANDER, New Orleans, La.: 2 mollusks from the Canal Zone and 1 insect (164150).

ROSE, LEWIS SAMUEL, San Francisco, Calif.: 440 plants, mostly from California (163742).

ROSEBOOM, LLOYD E., Baltimore, Md.: 33 slides of mosquitoes, including 31 larval slides and 2 slides containing the dissected holotype (164925, exchange).

ROSENGURTT, BERNARDO, Monzon-Heber, Uruguay: 107 plants from Uruguay (163178, 163236, 163589, 164558, 164947, 165225, 165467).

ROSS, Lt. EDWARD S., Fort Sam Houston, Tex: 9 specimens of mosquitoes (164455); 1 insect, apterous male, not heretofore represented in the Museum collection (164962, exchange); 9 specimens of insects, representing 7 species (164964).

Ross, Dr. H. H., Urbana, Ill.: 3 sawflies (164698). (See also under Illinois State Natural History Survey.)

Ross, Mrs. Wilda S., Santa Barbara, Calif.: 180 ants, representing 20 species (165411, exchange).

Royal Ontario Museum of Archaeology, Toronto, Ontario: Cast of ceremonial club from British Columbia (164420).

Runyon, Robert E., Brownsville, Tex.: 51 plants from Texas (164448)..

Rupert, Laurence R., Sardinia, N. Y.: 20 Lepidoptera, representing 2 species by holotype, allotype and paratypes (163595).

Ryder, Dr. Ernest N., Croton Falls, N. Y. (See under Estate of Mrs. Annette R. Ferris.)

Saalfrank, William, Washington, D. C.: 14 invertebrate fossils, including 13 Mississippian brachiopods and 1 Ordovician cephalopod from the vicinity of St. Louis, Mo. (164629).

Sackett & Wilhelms Lithographing Corporation, New York, N. Y.: 5 war posters, 6 duplicates (164351).

St. John, Dr. Edward P., Potsdam, N. Y.: Plant from New York (165301, exchange).

Salter, William E., Washington, D. C.: 3 parasitic isopods (163370); 10 land snails and 12 marine mollusks from Calvert County, Md. (163448); 1 jar of sponges from the beach at Longley's Bluff, St. Marys County, Md. (163808); 1 coprolite containing bird feathers from the Miocene, Calvert formation, Scientists' Cliffs, Calvert County, Md. (164909); 72 mollusks from 42d and Grant Streets, NE., Washington, D. C. (164949).

Samuel, Rev. John, Bay City, Mich.: 1 specimen of Cretaceous ammonite from Montana (163885).

Sarles, E. H., Norwood, Ohio: 2 specimens of conglomerate cemented by fluorescent calcium carbonate from Newton, Ohio (162469).

Savage, Henry G., Leominster, Mass.: 1 specimen of brodrickite from Bolton lime quarry, Bolton, Mass. (164916).

Sawaya, Dr. Paulo, São Paulo, Brazil: 23 aeglas from Brazil (164591).

Saxton, R. N., Arlington, Va.: 1 Virginia rail (163933).

Schaller, Dr. W. T. (See under U. S. Department of the Interior, Geological Survey.)

Scheffer, Dr. Victor B. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

Schmidt, Bertha W., Galesville, Wis.: Chipped stone artifacts collected 7 miles east of Galesville (164243).

Schmitt, J. B., New Brunswick, N. J.: 1 earwig from Summit, N. J. (163561, exchange).

Schmitt, Dr. Waldo L. (See under Smithsomian Institution, National Museum.)

Schroeder, William C., Cambridge, Mass.: 2 parasitic copepods and 11 isopods from Chesapeake Bay (164-762).

Schultz, Dr. L. P. (See under Smithsonian Institution, National Museum.)

Schuszler, Alajos, Arlington, Va.: 30 pictorial photographs for exhibition September 1942 (163722, loan); 3 pictorial photographs (163959).

Schwab, E. M., Richmond, Va.: Small collection of miscellaneous insects from Riverview Farm, Norge, Va. (163606).

Schwartzbach, Dr. Saul, Washington, D. C.: A collection of lizards from South Seymour Island, Galápagos Islands, including 2 young land iguanas (165170).

Schwarz, Dr. Ernst, Washington, D. C.: 1 house mouse collected in Arlington, Va., in 1941 (165370).

Schwengel, Mrs. F. R., Scarsdale, N. Y.: 6 marine mollusks from Florida and Fiji (164003); 2 mollusks from Florida (164325).

Scott, Prof. Gayle, Fort Worth, Tex.: (Through Dr. C. Wythe Cooke) 1 vial containing 53 lower Cretaceous echinoids, from Tarrant County, Tex. (164924).

Seagram Distillers Corporation, New York, N. Y.: 10 war posters (163789).

Segerstedt, Prof. Torgny, Göteborg, Sweden: (Through U. S. Department of State) Handkerchief bearing printed design commemorating battles and personages of the American Revolution (164444).

Seibert, R. J., Washington, D. C.: Fish spear and photograph of Choco Indian family from which spear was obtained, Río Truando, Choco Intendencia, Colombia (164433); 6 seeds from Haiti (164977).

Sellards, Prof. E. H. (See under University of Texas.)

Seyfried, Capt. J., Washington, D. C.: 1 octopus taken off west side of South Seymour Island, Galápagos Islands, June 26, 1942 (163388).

Seymour, Dr. Allyn, Seattle, Wash.: 37 mollusks from Rose Harbor on Kunghit Island, Queen Charlotte Islands, British Columbia (165192).

Shannon, R. C., Trinidad, B. W. I.: 1 skin and skull of weeping capuchin from Nariva Swamp, Trinidad, collected by donor in November 1942 (164846).

Shantz, Dr. H. L., Washington, D. C.: 3 specimens of bark cloth from East Africa, and 1 raffia mat from Belgian

Congo, collected by the donor in 1920 (165086); 3 bags woven of fiber from a species of *Raphia;* used for shipping oil palm kernels, collected by the donor, January 26, 1920, at Kindu, Belgian Congo (165440).

SHAPOVALOV, LEO, Stanford University, Calif.: 5 crayfishes (163618); 6 crayfishes from Trinity River, northern California (164020).

SHARP & DOHME, INC., Philadelphia, Pa.: 1 specimen each of North and South American lypholized antisnakebite serum for the antivenin exhibit (163633).

SHECKELL, R. O., East Orange, N. J.: 60 pictorial photographs for special exhibition during April 1943 (165044, loan).

SHELDON-CLAIRE Co., Chicago, Ill.: 30 war posters of the company's "Produce for Victory" campaign (163799).

SHELL OIL Co., Centralia, Ill.: (Through L. M. Clark) 118 lots of samples taken from Devonian limestone from deep wells in Illinois (164105).

SHELLY, FREEMAN M., Philadelphia, Pa. (See under Philadelphia Zoological Garden.)

SHIELDS, Lt. Comdr. EDWARD M., Jacksonville, Fla.: Fern from New York (164922).

SHOEMAKER, E., Brooklyn, N. Y.: 50 miscellaneous insects, mostly beetles, collected on St. George Island, Pribilof Islands (164071); 1 beetle, topotype (165369, exchange).

SIMON, ADOLPHE J. L. (deceased): (Through Louis A. Simon) Silk portrait of Joseph Marie Jacquard (1752–1834) woven on a silk loom with a Jacquard attachment at Lyon, France, in 1839, in memory of this inventor (163814).

SIMON, LOUIS A. (See under Adolphe J. L. Simon.)

SINGER SEWING MACHINE Co., New York, N. Y.: 1 surgical stitching instrument, complete with extra needles and case, and a green felt sampler showing numerous types of surgical suturing (165087).

SKINNER, WILLIAM, & SONS, New York, N. Y.: Navy cap ribbon, new type, letters in gold leaf fused into cut ribbon of acetate rayon (165002). (See also under Jerro Bros.)

SMITH, CHESTER F. (See under Standard Oil Co. of New Jersey.)

SMITH, Dr. HUGH M. (deceased). (See under Thailand Government, Bureau of Fisheries, Bangkok, Thailand.)

SMITH, MAXWELL, Lantana, Fla.: 12 mollusks, including 2 holotypes of new species, from Florida, Panama, and the Philippines (157512).

SMITHSONIAN INSTITUTION, Washington, D. C.: 1 etching, "Back to Earth," by George H. Wright, N. A., associate member print of the Society of American Etchers (164895, deposit); printed poster entitled "The Four Freedoms" (164653, deposit).

Bureau of American Ethnology: Archeological materials collected at Tres Zapotes, Tuxtla District, southern Veracruz, during the winters of 1938–39 and 1939–40 by the Smithsonian Institution–National Geographic Society expedition under M. W. Stirling; included are two small lots purchased from San Marcos and Loma de Alonso Lazaro (162682); 14 ethnological specimens originally obtained by C. Spencer from the Payamino Indians, eastern Ecuador, and 3 archeological specimens from excavations along the Napo River in the vicinity of Eden, Ecuador (163712); 1 stone ax blade and 5 bark cloth dance masks collected by Dr. Irving Goldman from the Kobeua (Cubeo) Indians of the Vaupés River Valley, Department of Vaupés, southeastern Colombia (165123).

Library: 1 book (164366, deposit).

National Museum, collected by members of the staff: Cooper, Dr. G. A., and Dr. A. S. Warthin, Jr.: 2,500 Devonian fossils from Illinois, Missouri, and Iowa, collected during field explorations, August 1 to September 25, 1942 (164417); Foshag, Dr. W. F.: 1 left humerus from zone 12, Miocene, Calvert formation (165020); Gilmore, C. W.: 236 specimens of fossil vertebrates collected by the 1942 paleontological expedition in the Oligocene, Brule division, from Niobrara County, Wyo. (163084); Killip, E. P.: 72 plants from New Jersey (163445); Resser, Dr. C. E.: Casts of 258 type lots of Cambrian and Ordovician fossils from Vermont, Quebec, Newfoundland, and Nevada contained in the Museum of Comparative Zoology, Yale Peabody Museum, Columbia University, and National Museum of Canada (163537); Riley, J. H. (deceased): 80 bird skins, 1 bird skeleton, 7 mammal skins and skulls (163642); Schmitt, Dr. Waldo L.: 1 flyingfish from Aeolian Bay and a small collection of plants from South Seymour Island, Galápagos Islands, collected by Dr. Schmitt in June 1942 (163446); Schultz, Dr. L. P.: Fishes, amphibians, reptiles, mammals, insects, mollusks, bird, crustaceans, algae,

mostly from the Maracaibo Basin, Venezuela, collected in February through May 1942 (161595); 1 fish jaw collected halfway between Scientists' Cliffs and mouth of Parker Creek, Calvert County, Md., from Miocene, Calvert formation, and also 1 fossil sand-dollar (165108); Walker, Dr. E. H.: 297 plants from North Carolina and South Carolina (165378); Watkins, William N.: 1 trunk section, 9 inches in diameter and 3 feet long, of Simon poplar, from the Smithsonian grounds (163581).

National Museum, obtained by purchase: 500 moths, butterflies, and beetles collected in New Guinea (160041); 65 birds from Ecuador (162805); 3 casts of fossil apes obtained many years ago but not accessioned heretofore as far as can be determined (163547); 25 mosses (164119); 1 reptile specimen consisting of 14 caudal vertebrae from the Upper Cretaceous of Bollinger County, Mo. (164163); 947 plants from Mexico (164374); a Woodward solar camera No. 968 made about 1877, a clockwork for driving a heliostat; and a hand-driven chain-stitch sewing machine, period of 1866 (164494).

National Museum, Photographic Laboratory: 1 Cassegrain camera (164191).

National Zoological Park: 5 African antelopes collected by Dr. A. B. Baker in British East Africa in 1909 (head skins only) (163499); 19 bird skeletons and 5 bird skins (163771); 14 mammals (163917); 2 electric eels from South America (164185); 9 skeletons of birds and 2 bird skins (164334); 8 bird skeletons and 1 bird skin (164703); 20 bird skeletons and 4 bird skins (165166); 45 mammals (165232); 12 bird skeletons; 4 bird skins; 2 birds' eggs (165434); 10 mammals (165473).

Smithsonian War Committee: 24 war posters (163563).

SMYTH, E. GRAYWOOD, Glen Ellen, Calif.: 4 insects collected in California (164025);

SOHN, J. GREGORY, South Strafford, Vt.: 2 specimens of copper ore from Eureka mine, Corinth, Vt., and Elizabeth Mine, South Strafford, Vt. (164989);

SOMMERMAN, KATHRYN M., Urbana Ill.: 3 insects (164941);

SORENSEN, A., Pacific Grove, Calif.: 1 mollusk from Magdalena Bay on the west coast of Baja California (163353).

SOUKUP, J., S. S., Lima, Peru: 122 plants from Peru (164431, 165414).

SOUTH DAKOTA, UNIVERSITY OF, Vermillion, S. Dak.: Plant from South Dakota (164078).

SOUTHERN BIOLOGICAL SUPPLY CO., INC., New Orleans, La.: 10 crayfishes (109429).

SOUTHWORTH, CHARLES, Thedford, Ontario: 100 Devonian brachiopods from Ontario (164722).

SOXMAN, G. M., Dallas, Tex.: 5 plants from Texas (163454).

SPERRY, D. R., & Co., Batavia, Ill.: 1 wooden filter-press plate and frame (164927).

SPICER, V. D. P., San Francisco, Calif.: 21 mollusks from Midway Island, including 1 type (164192, 165258).

SPRINGER FUND, Smithsonian Institution: 12 Devonian crinoids from Ontario (164701).

STABLER, SIDNEY SNOWDEN, Hyattsville, Md.: 119 specimens of historical pharmaceutical and medical objects used at Roslyn Farm, Brighton, Md., by Henry Stabler and Dr. Augustus Stabler, grandfather and father of the donor (163863).

STALLINGS, DON B., Caldwell, Kans.: 6 Lepidoptera (163596).

STANDARD OIL CO. OF NEW JERSEY, New York, N. Y.: (Through Chester F. Smith) A scale model of the Bayway Unit Polymer Plant for producing high-grade motor fuel and aviation gasoline blending stock (163739, loan).

STANFORD UNIVERSITY, Stanford University, Calif.: Homotypes and paratypes of 31 species of Eocene Foraminifera from the Lodo formation, Fresno County, Calif. (164723, exchange); 585 plants from northern Mexico (164695, exchange); (through Margaret Storey) 2 fishes from Shansho Cano, vicinity of Pevas, Peru, and the Ampiyacu River, vicinity of Pevas, Peru, collected by W. G. Scherer (164631, exchange).

STANLEY-BROWN, Mrs. JOSEPH, Kew Gardens, Long Island, N. Y.: (Through Mrs. Herbert Feis) 261 ethnological objects, mostly from the Aleut and southeastern Alaskan Indian tribes, collected by the donor's husband in 1890–1898 when he was stationed at Dutch Harbor in charge of the Pribilof Island seal fisheries (165342).

STANTON, EDWARD, Douglas, Ariz.: 3 crystals of calcite from 1¼ miles west of Arispe, Sonora (163728); 2 specimens of fluorite from the Governor mine, Socorro County, N. Mex. (164330).

STATE, U. S. DEPARTMENT OF. (See under Prof. Torgny Segerstedt.)

STAUBER, Dr. LESLIE A., Bivalve. N. J.: 10 crabs (164140).

STEARNS, JOSEPH L., Laurel, Md.: 1 plant from North Carolina (164202); 20 common woods indigenous to South Africa (164418); 2 plants from Ontario (164538); samples of 5 woods native to the United States (165439, exchange).

STEBBINS, A. C., Washington, D. C.: 26 pieces of photographic equipment from the studio of donor's brother now deceased (164051).

STEERE, Dr. WILLIAM, Washington, D. C.: 84 plants from Colombia (164781).

STEHLE, Dr. H., Tivoli, Fort-de-France, Martinique: 750 plants from Martinique (165205).

STEJNEGER, Dr. LEONHARD (deceased): (Through Mrs. Leonhard Stejneger) Ornamental snuffbox bearing the registry mark of Bergen, Norway, and originally presented to donor by his grandfather on the occasion of his confirmation (164959).

STEJNEGER, Mrs. LEONHARD, Washington, D. C.: 1 5″ × 7″ Pony Premo Sr. camera; rapid rectilinear lens; two 5″ × 7″ plate holders; 1 Swivel tripod head; 1 4″ × 5″ America Optical Company camera; Waterbury lens, No. 8667 (165187). (See also under Dr. Leonhard Stejneger.)

STEPHENS, Prof. T. C., Sioux City, Iowa: 271 mollusks from Iowa (163683).

STEPHENSON, H. K. (See under Prof. D. C. Stockbarger.)

STEPHENSON, Dr. L. W., Washington, D. C.: 75 fresh-water mussels from Texas, collected by Dr. Stephenson and Marc O. Miller (164419).

STEPHENSON, W. J. (See under National Speleological Society and Prof. Roy J. Holden.)

STERNBERG, GEORGE F., Hays, Kans.: 1 lot of 297 teeth of the pavement-toothed shark from the Niobrara formation and 27 fossil pearls from the Benton and Niobrara formations of Kansas (163772, exchange).

STEVENS INSTITUTE OF TECHNOLOGY, Hoboken, N. J.: (Through Dr. Robert L. Klein) 2 specimens of graphite from Korea and Madagascar (163956).

STEWART, J. C., Berwyn, Md.: An exhibition specimen of conifer log from the Potomac formation near Berwyn, Md. (163538).

STEWART, Dr. R. R., New York, N. Y.: 198 ferns from India (165129, exchange).

STEWART, Dr. W. W., Washington, D. C.: 1 mounted moose head (163900).

STILLINGER, RICHARD C., Moscow, Idaho: 31 plants, mostly from Idaho (164622).

STOCKBARGER, Prof. D. C., Cambridge, Mass.: (Through H. K. Stephenson) 1 specimen of optical fluorite from Madoc, Ontario (163429).

STODDARD, H. L., Thomasville, Ga.: 56 bird skins from Georgia and Florida (164042); 1 hooded merganser (164483).

STOREY, MARGARET. (See under Stanford University.)

STOTTLEMEYER, MARGARET A. R., Washington, D. C.: 1 decorated porcelain pipe bowl, 1 glazed effigy terra-cotta pipe, and 1 green and copper luster creamer (165299).

STRICKLAND, J. C., Petersburg, Va.: 151 plants from Virginia (163845, 165130).

STRIMPLE, H. L., Bartlesville, Okla.: 11 crinoids and 1 edrioasteroid from the Mississippian of Iowa and Oklahoma (163449); a small collection of Ostracoda and other microfossils from the Pennsylvanian, Hogshooter formation, just north of Ramona, Okla. (163690, exchange).

STUART, W. W., Des Moines, Iowa: A Thomson-Houston electric lamp socket without its housing, c. 1898 (165260).

SWEENEY, FANNY S. (See under Mrs. Kate M. Anderson.)

TACQUIN, Dr. A. J., Safi, Morocco: (Through Ensign Arthur G. Humes) 75 bird skins; 3 mammals (165436).

TANNER, Dr. VASCO M., Provo, Utah: 2 fishes collected July 26, 1942, by Guy L. Hendrix, in stream and big spring, between Preston and Lund, White River Valley, White Pine County, Nev. (164626).

TATE, RALPH D., Seat Pleasant, Md.: 1 albino turtle from near Marlborough, Md. (164665).

TATUM, JAMES A., Alamogordo, N. Mex.: Section of petrified tree trunk from the Sacramento Mountains near Alamogordo (164106).

TEMPLEMAN, Prof. WILFRED, St. John's, Newfoundland: 2 squids from Comfort Bight, Labrador, and 6 ticks, nymphs, and adults of a species of *Ixodes* from Placenta Bay, Newfoundland (162672).

TENNESSEE VALLEY AUTHORITY, Norris, Tenn.: (Through Dr. A. R. Cahn) 4 vials of leeches and 1 vial parasitic copepods, small collection of insects; and 3 parasitic worms from Tennessee (146628); (through Jack S. Dendy) 40+ parasitic copepods (165200); (through Robert A.

Laurence): 25 unique crustaceans and unusual trails presumably from Upper Cambrian strata, at the Douglas Dam, French Broad River, Tenn. (164128).

TEXAS, UNIVERSITY OF, Austin, Tex.: (Through Prof. E. H. Sellards) 1 cast of skull and lower jaws of Triassic reptile from Texas (164030).

THAILAND GOVERNMENT, *Bureau of Fisheries*, Bangkok, Thailand: (Through Dr. Hugh M. Smith) 14 fishes from Thailand (163584, deposit).

THOMAS, Prof. C. A., Kennett Square, Pa.: 1 moth (164278).

TITANIUM ALLOY MANUFACTURING CO., Niagara Falls, N. Y.: Enameled pan showing texture and opacity imparted by zirconium oxide, a replacement material for tin, antimony, and other critical materials; also 5 samples of various zirconium opacifiers and 3 tiles glazed and tinted with zirconium glazes (164457).

TOBIN, GEORGE T., New Rochelle, N. Y.: 12 drypoints, 20 wax-pencil drawings for special exhibition during May 1943 (165237, loan); 11 drypoints of figure subjects from the special exhibition of drypoints and wax-pencil drawings (165475).

TOLMAN, R. P., Washington, D. C.: 2 modern mechanical pencils and 1 old mechanical pen and pencil, with disappearing point arrangement; before 1885 (163382).

TORONTO, UNIVERSITY OF, Toronto, Ontario: (Through Dr. M. W. Bannan): 20 microscope mounts of woods (163656, exchange).

TOWLES, WILL H., Bethesda, Md.: 10 portraits (164239).

TOWNES, Dr. HENRY K., Washington, D. C.: 585 specimens of Ichneumonidae representing 249 species, 214 of which are North American and 35 exotic (163827, exchange); 1 phyllopod from a temporary pond at Takoma Park, Md. (164416).

TRAUB, Dr. HAMILTON P., Beltsville, Md.: 5 plants (163399).

TREASURY, U. S. DEPARTMENT OF THE, *Bureau of the Mint*: 32 United States coins struck at the Denver, Philadelphia, and San Francisco mints in 1942 (164981).

War Savings Staff: 53 war posters and 22 assorted booklets and general literature relating to War Savings bonds and stamps (163675, 163715, 163730).

TRESSLER, Dr. WILLIS L., College Park, Md.: 3 slides of Lower Pleistocene Ostracoda from Langleys Bluff, Md. (163875).

TRUMBO, RICHARD, Haymarket, Va.: Airplane receiving set, c. 1917, type SCR 59, made by the Western Electric Co. (164132).

TURPIN, JEAN, Indian Head, Md.: 15 plants from Maryland (165167).

TUTCHINGS, Mrs. PATRICIA MACDONALD, New York, N Y.: 7 framed portraits by Pirie MacDonald, "Photographer of Men" (162945).

UBIDIA B., JORGE, Bogotá, Colombia: 9 fishes from Lago de Tota, Boyaca, Cordillero Oriental, Colombia; also crustaceans and insects (164570).

ULLRICH, ELSIE, Philadelphia, Pa.: (Through Mrs. George A. Hatzes) Pink luster coronation cup and saucer with painted medallions of Queen Victoria and her consort, Albert (164848).

ULMER, JOSEPH, Washington, D. C.: (Through John W. McBurney) 1 specimen of gold ore from Larco mine, Santander Province, Colombia (163871).

UNITED AIRCRAFT CORPORATION, East Hartford, Conn.: (Through S. D. Warren Co.) 49 war posters (164005).

U. S. PHARMACOPOEIAL CONVENTION, INC., Philadelphia, Pa.: (Through Dr. E. Fullerton Cook) 1 copy of the Pharmacopoeia of the United States of America, Twelfth Revision (official copy 340), for addition to the collection illustrating the history of United States medical standards (163990).

UNIVERSIDAD AUTÓNOMA DE COCHABAMBA, Bolivia: (Through Dr. Martín Cárdenas) 7 beetles from Bolivia (161931).

UNIVERSITETETS BOTANISKE MUSEUM, Copenhagen, Denmark: 15 plants from tropical America (104053, exchange).

URIBE, Rev. Father LORENZO, S. J., Bogota, Colombia: Plant from Colombia (164828).

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah: (Through Dr. George F. Knowlton) 27 leafhoppers, comprising 14 species, all named except one, including 23 paratypes (164454).

VALENCIA, Dr. JUAN IGNACIO, Buenos Aires, Argentina: 17 grasses from Argentina (163921).

VAN CLEAVE, Prof. H. J., Urbana, Ill.: 3 slides of paratypes of helminths (164869).

VAN HYNING, Prof. T., Gainesville, Fla. (See under Florida State Museum.)

VAN SANT, ROBERT M., Baltimore, Md. (See under Baltimore & Ohio Railroad Co.)

VARGAS C., Dr. CESAR, Cuzco, Peru: 47 plants from Peru (164383).

VASSALLO, Master CHARLES, Jr., Fair-

field, Conn.: 2 beetles collected in Fairfield (163685).

VAUGHAN, Dr. T. W., Washington, D. C. (See under Dr. Don L. Frizzell.)

VENDITTY, A. M., Washington, D. C.: 1 "Adlake" magazine plate camera 3¼"×4¼" in size (163672, loan).

VICTORIN, Prof. MARIE, Montreal, Quebec: Fern from Cuba (165443).

VINES, ROBERT A., Houston, Tex.: Palm from Texas (163328).

VIRGINIA AGRICULTURAL EXPERIMENT STATION, Blacksburg, Va.: 35 mice, 9 skins and skulls, remainder skulls only, taken at Stuart, Patrick County, and at Staunton, Va., December 1941 and January 1942 (163643).

VOGT, WILLIAM, Washington, D. C.: 2 Inca terns (164388).

VON DAUR, Mme. BLANCHE SMEDLEY, New York, N. Y.: Parasol of Chantilly lace and mother-of-pearl handle originally acquired in Paris, France, in 1869, and 2 lace handkerchiefs formerly belonging to the mother and to the sister of donor (165403).

VOSPER, Mrs. HANNAH FIELD, Philadelphia, Pa.: 1 length of single-width homespun carpeting handwoven in a colorful stripe pattern, using tied and dyed wool warp and cotton weft, by the donor's mother, Hannah (Johnston) Field, at the Tecter Farm near Smithville, Ontario, prior to her marriage in October 1852 (164147).

WADE, Mrs. BERTHA, Washington, D. C.: A Confederate flag and canteen of the period of the Civil War (165001).

WADE, DOUGLAS E. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

WAGNER, W. H., Sr., Washington, D. C.: 310 Lepidoptera (163390).

WAKE, RALPH WILLIAM, Washington, D. C.: Projectile points, blades, and rejectage found in June 1925, at New Alexandria, east of Mount Vernon Memorial Highway about ¾ mile south of Hunting Creek Bridge and just above the Potomac River, Fairfax County, Va.; also 2 points from District of Columbia (164624).

WALKER, Dr. E. H., Washington, D. C.: 764 plants mostly from Eastern United States (165373). (See also under Smithsonian Institution, National Museum.)

WALKER, Prof. ELDA R. (See under University of Nebraska.)

WALKER, ERNEST P., Washington, D. C.: 1 mouse collected in Larimer County, Colo., in 1939, by Lt. W. Bart Greenwood (163874); 1 hamster (165372). (See also under M. E. Musgrave.)

WALLEY, G. STUART, Ottawa, Ontario. (See under Canadian Government, Department of Agriculture.)

WAR DEPARTMENT, U. S.:

Adjutant General's Office: 32 booklets with information for recruitment and 23 war posters (163798).

Bureau of Public Relations: 20 war posters, 2 copies each of 10 posters (163677).

Headquarters, Services of Supply: 11 war posters (163676).

Laboratory, Fourth Service Command, Fort McPherson, Ga.: (Through Capt. Woodrow W. Middlekauff) 11 specimens of mosquitoes, representing 6 species, all in the larval stage (165024, exchange); 5 flies (165082).

Office of the Quartermaster General: Silver Star, Soldier's Medal, and Distinguished Flying Cross, with accessory ribbons and lapel buttons (163189); skin and skull of Kidron, General Pershing's horse, which died on October 10, 1942, at Front Royal, Va. (164991).

U. S. Engineer Office: Distal end of femur of sauropod dinosaur from Potomac formation from McMillan Reservation, Washington, D. C. (163793). (See also under Julius Lauer.)

WARE, Dr. R. E., Clemson, S. C.: 1 fresh-water jellyfish (163857); 30+ ostracods (165257).

WARREN, Mrs. FISKE, Boston, Mass.: An extremely fine specimen of Lamarck's *Spondylus,* a marine bivalve mollusk from the Moluccas (164232); 37 marine shells from the Indian Ocean and 30 land shells from the Philippines, the Moluccas, and Japan (165191).

WARREN Co., S. D., Boston, Mass.: 12 war posters and 1 poster booklet (163991). (See also under United Aircraft Corporation.)

WARTHIN, Dr. A. S., Jr. (See under Smithsonian Institution, National Museum.)

WASHINGTON, UNIVERSITY OF, Seattle, Wash.: 122 plants (163815, exchange).

WATKINS, WILLIAM N. (See under Smithsonian Institution, National Museum.)

WEIDENER, REYNOLD H., Grand Rapids, Mich.: Mezzotint, "Thunderhead Crest," by the donor (163585).

WELLS, J. ROBERT, La Oroya, Peru: 1 microcephalic skull without lower jaw from Chilca, Peru (164514).

WENZELL, E. V., Baltimore, Md. (See under The Camera.)

WEST VIRGINIA UNIVERSITY, Morgantown, W. Va.: 1 plant (163051, exchange).

WETMORE, Dr. ALEXANDER, Washington, D. C.: 41 coins, tokens, and paper currency (163931); 1 house mouse collected in the National Museum by the donor on January 14, 1943 (164859); 1 starling (165186); 1 young robin (165435).

WHARTON, J. R., Roseburg, Oreg.: 1 polished piece of "bird's-eye" quartz, 1 specimen of pyrite-coated pebbles in conglomerate, and 1 specimen of "Teredo wood" from Roseburg, Oreg. (164422).

WHEELER, Col. JAMES A., Washington, D. C.: A collection of 34 weapons, a chain cuirass, and brass helmet collected by donor in 1900 from the Moro on the island of Mindanao; Filipino bamboo flute, bamboo pipe, and riding paraphernalia; and an antique gun purchased in Japan (165325).

WHEELER, WILLIAM M., Jr., and WHEELER, PAUL, Colebrook, Conn.: 6 trap-door spiders collected in Nashville, Tenn. (165023).

WHERRY, Dr. EDGAR T., Philadelphia, Pa.: Fern from vicinity of Washington, D. C. (164034); plant from Florida (164838).

WHIPP, CHARLES, Washington, D. C.: 2 wax cylinder phonograph records dating from about 1905 (163379).

WHITE, Dr. LEONARD A., Washington, D. C.: A Canton, China, stoneware hot-water mess plate and a Queen Anne pewter tobacco box (164953); flint-lock fowling piece and powderhorn (165184).

WHITLOCK, Mrs. BRAND (deceased): Diamond and platinum bracelet presented to Mrs. Brand Whitlock by Elizabeth, Queen of the Belgians (163768, bequest).

WHITNEY, JOSEPHA, Darien, Conn.: (Through Mrs. Dora G. Ogle) 1 lithograph by Fra Pagliusto of a self-portrait by Bartolomeo Pinelli (163876).

WICKERSHAM, J. Y., Ontario, Calif.: "Long" white gauze shawl, woven of wool obtained from the under fleece of the Tibetan goat, decorated with woven silk stripes and a block-printed Oriental pattern somewhat modified by French influence, similar to a type which originated about 1845 at Lyon, France (164829).

WIGGLESWORTH, Dr. W. B. (See under London School of Hygiene and Tropical Medicine.)

WILKISON, Mrs. F. W., Indiantown, Fla.: (Through Horace Atwood). Wooden ladle made and used by the Seminole Indians of the Florida Everglades (163835).

WILLIAMS, JOSEPH L., Lincoln University, Pa.: 1 lot of nematodes and 1 insect (163314); 36 hymenopterous parasites (163502); 1 insect (165198).

WILLIAMS, Dr. J. S., Logan, Utah: 15 brachiopods from Lower Carboniferous rocks of Utah (164004).

WILSON, L. WAYNE, Moorefield, W. Va.: 6 mollusks from W. Va. (161194).

WINGER, Prof. RICHARD N., Laramie, Wyo.: Type of helminth (163077).

WISCONSIN, UNIVERSITY OF, Madison, Wis.: (Through Prof. N. C. Fassett) 115 plants, mostly from Wisconsin (164338, exchange).

WOLF, Dr. CARL B. (See under Rancho Santa Ana Botanic Garden.)

WOLFE, Col. L. R., Washington, D. C.: 8 bird skins and the head of a bird from Eritrea, a locality hitherto unrepresented in the Museum collections (163796).

WOODSON, Dr. ROBERT E., Jr., St. Louis, Mo.: 138 plants from Panama (162762, 164406, 164213).

WOOTON, Dr. E. O., Arlington, Va.: Specimen of slime-mold from Virginia (164341).

WORKS PROJECTS ADMINISTRATION, Washington, D. C.: Archeological specimens obtained between 1937 and 1940 at Irene Mound site, Chatham County, Ga., collected by the WPA under sponsorship of the Chatham County Commissioners and the Savannah Chamber of Commerce (160819).

New York City War Service Project, New York, N. Y.: 20 war posters (163786).

WRIGHT, Prof. A. H., Ithaca, N. Y.: 2 salamanders from New Mexico (163918).

WYATT, ALEX K., Chicago, Ill.: 42 larvae, representing 11 species (165433).

WYOMING. UNIVERSITY OF, Laramie, Wyo.: (Through Prof. Aven Nelson) 186 plants from Wyoming (163671, exchange).

YALE UNIVERSITY, New Haven, Conn.: Wood samples of 3 species (164928, exchange).

YOLLES, STANLEY F., Trinidad, B. W. I.: 16 mollusks from Cayenne, French Guiana (165408).

ZETEK, JAMES, Balboa, Canal Zone: 200+ isopods from Barro Colorado Island, Canal Zone (164883).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1942–43

REPORT

Report on the progress and condition of the United States National Museum for the fiscal year ended June 30, 1942. 8vo, iii+118 pp. January 1943.

BULLETINS

Bulletin 180. Fishes of the Phoenix and Samoan Islands collected in 1939 during the expedition of the U. S. S. *Bushnell*. By Leonard P. Schultz. 8vo, x+316 pp., 27 figs., 9 pls. January 20, 1943.

Bulletin 181. The cyclophorid operculate land mollusks of America. By Carlos de la Torre, Paul Bartsch, and Joseph P. E. Morrison. 8vo, iv+306 pp., 42 pls. August 21, 1942.

Bulletin 182. Monograph of the West Indian beetles of the family Staphylinidae. By Richard E. Blackwelder. 8vo, viii+658 pp. 3 figs., 19 maps. January 27, 1943.

PAPERS PUBLISHED IN SEPARATE FORM

FROM VOLUME 28, CONTRIBUTIONS FROM THE UNITED STATES NATIONAL HERBARIUM

Title page, table of contents, and index. Pp. i–xiii, 677–694. December 16, 1942.

FROM VOLUME 88 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i–viii, 587–615. August 18, 1942.

FROM VOLUME 89 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i–ix, 583–620. November 28, 1942.

FROM VOLUME 90 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i–vii, 553–581. December 18, 1942.

FROM VOLUME 91 OF THE PROCEEDINGS

No. 3131. Catalog of human crania in the United States National Museum collections: Eskimo in general. By Aleš Hrdlička. Pp. 169–429, fig. 39. August 1, 1942.

No. 3132. The species of *Aegla*, endemic South American fresh-water crustaceans. By Waldo L. Schmitt. Pp. 431–520, figs. 40–64, pls. 25–28. August 18, 1942.

FROM VOLUME 92 OF THE PROCEEDINGS

No. 3147. New species of bark beetles (Pityophthorini) from Mexico and Tropical America (Coleoptera, Scolytidae). By M. W. Blackman. Pp. 177–228, pls. 20–23. November 25, 1942.

No. 3148. Osteology of *Polyglyphanodon*, an Upper Cretaceous lizard from Utah. By Charles W. Gilmore. Pp. 229–265, figs. 16–36, pls. 24–26. October 13, 1942.

No. 3149. Notes and new species of Microlepidoptera from Washington State. By J. F. Gates Clarke. Pp. 267–276, pls. 27–32. October 13, 1942.

No. 3150. The genotypes of some of Ashmead's genera of ichneumon-flies. By R. A. Cushman. Pp. 277–289. October 8, 1942.

No. 3151. New Neotropical insects of the apterygotan family Japygidae. By H. E. Ewing and Irving Fox. Pp. 291–299, pls. 33, 34. October 1, 1942.

No. 3152. The fresh-water fishes of Liberia. By Leonard P. Schultz. Pp. 301–348, fig. 37, pls. 35, 36. November 13, 1942.

No. 3153. Mexican herpetological miscellany. By Hobart M. Smith. Pp. 349–395, fig. 38, pl. 37. November 5, 1942.

No. 3154. Revision of the genus *Phloeosinus* Chapuis in North America (Coleoptera, Scolytidae). By M. W. Blackman. Pp. 397–474, pls. 38–41. December 21, 1942.

No. 3155. The Late Cenozoic vertebrate faunas from the San Pedro Valley, Ariz. By C. Lewis Gazin. Pp. 475–518, figs. 39–47, pls. 42, 43. December 10, 1942.

No. 3156. The type species of the genera and subgenera of bees. Grace A. Sandhouse. Pp. 519–619. March 5, 1943.

FROM VOLUME 93 OF THE PROCEEDINGS

No. 3157. The Nearctic species of parasitic flies belonging to *Zenillia* and allied genera. By Wendell F. Sellers. Pp. 1–108. January 19, 1943.

No. 3158. A new fossil reptile from the Upper Cretaceous of Utah. By Charles W. Gilmore. Pp. 109–114, figs. 1–5. December 12, 1942.

No. 3159. Some American geometrid moths of the subfamily Ennominae heretofore associated with or closely related to *Ellopia* Treitschke. By Hahn W. Capps. Pp. 115–151, pls. 1–10. February 24, 1943.

No. 3160. Skeletal remains with cultural associations from the Chicama, Moche, and Virú Valleys, Peru. By T. D. Stewart. Pp. 153–185, pls. 11–18. January 23, 1943.

No. 3161. New marine mollusks from the Antillean region. By Harald A. Rehder. Pp. 187–203, pls. 19, 20. January 20, 1943.

No. 3162. A new pest of *Albizzia* in the District of Columbia (Lepidoptera: Glyphipterygidae). By J. F. Gates Clarke. Pp. 205–208, pls. 21–25. March 9, 1943.

No. 3163. Osteology of Upper Cretaceous lizards from Utah, with a description of a new species. By Charles W. Gilmore. Pp. 209–214, figs. 6–10. January 19, 1943.

No. 3164. The birds of southern Veracruz, Mexico. By Alexander Wetmore. Pp. 215–340, fig. 11, pls. 26–28. May 25, 1943.

No. 3165. New genera and species of bark beetles of the subfamily Micracinae (Scolytidae, Coleoptera). By M. W. Blackman. Pp. 341–365, pls. 29–30. March 22, 1943.

No. 3166. Notes on some barnacles from the Gulf of California. Dora Priaulx Henry. Pp. 367–373, pl. 31. May 3, 1943.

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REPORT OF

THE UNITED STATES NATIONAL MUSEUM

1944

SMITHSONIAN INSTITUTION
WASHINGTON
D. C.

SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1944

Cx. R. 63.

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1945

For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.
Price 35 cents

UNITED STATES NATIONAL MUSEUM,
UNDER DIRECTION OF THE SMITHSONIAN INSTITUTION,

Washington, D. C., October 14, 1944.

SIR: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1944.

Very respectfully,

ALEXANDER WETMORE,
Director, U.S. National Museum.

THE SECRETARY,
Smithsonian Institution.

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REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1944

By ALEXANDER WETMORE

Assistant Secretary of the Smithsonian Institution, Director of the United States National Museum

OPERATIONS FOR THE YEAR

APPROPRIATIONS

FUNDS for the operation of the United States National Museum for the year ended June 30, 1944, were included in the appropriation "Salaries and Expenses, Smithsonian Institution," which, as an item in the Executive and Independent Offices Act for the fiscal year 1944, was approved on June 26, 1943. All the Federal activities administered by the Smithsonian Institution, excluding the National Gallery of Art, were covered in one appropriation. That portion of the overtime pay due members of our staff under the War Overtime Pay Act of 1943, not covered by savings in the regular appropriation, was provided for in the first Deficiency Act, 1944 (Publ. Law 279, approved April 1, 1944). Moneys required for the Museum were allotted from the regular appropriation and the Deficiency Act, and are summarized as follows:

Preservation of collections:	
Regular appropriation	$422,765
First Deficiency Act	9,860
Maintenance and operation:	
Regular appropriation	422,439
First Deficiency Act	31,935
Printing and binding	43,000
Total available for the year	929,999

In combining the appropriations of the Smithsonian Institution, the former appropriation "Preservation of Collections, Smithsonian Institution" became an allotment, and the name of the project was changed to "National Museum."

By internal reorganization the project "Maintenance and Operation" was enlarged by adding to it the guard, labor, and char forces formerly included under "Preservation of Collections," as well as the guard force from the project "National Collection of Fine Arts" and laborers from the project "General Administration." This change brought into one project the guard force of the Smithsonian

Institution and the mechanics, laborers, and char force responsible for the maintenance and operation of all the buildings of the Smithsonian Institution, excluding the National Gallery of Art. The considerable increase in funds allotted for "Maintenance and Operation" and the decrease in the allotment for the "National Museum" (Preservation of Collections) as compared with the previous year are explained by this reorganization.

Payment for overtime service of the personnel of the Museum was made throughout the year.

The allotment for printing and binding was the same as for the preceding year. With the restrictions the Museum has placed on its publications during the war period, the sum is adequate except that binding of the valuable reference library is in arrears. The sum now available will be entirely inadequate when the usual program of publication is resumed. Science suffers when publication is restricted. The facts discovered from research on the national collections attain their full utility only when they become generally available to other workers.

The staff was at a low ebb owing to the fact that 1944 was the first full year under the reduced personnel ceiling placed on the Institution. The National Museum lost 55 positions by the imposition of this ceiling, and the man-years of service by permanent personnel dropped from 373 in 1943 to 321 in 1944. Loss from this sharp decrease was felt in all activities of the Museum, from classification, care, arrangement, and study of the collections to maintenance, operation, and repair of the buildings. The ceiling on personnel cannot be blamed alone for this situation, for the acute manpower shortage made it most difficult to recruit personnel in all categories wherever there were vacancies in positions. The condition imposes a most pressing postwar problem on the Institution. While an acute shortage in personnel can be offset for short periods by increased effort on the part of the reduced staff, this cannot be expected to continue. The collections now housed in the National Museum are of such great value to the science, the culture, and the history of our country that their preservation must be adequate under all conditions. The arrearage in the work of the Museum, already considerable, has been increased unduly. Safety demands that it be reduced. To accomplish this, more personnel and more space must be provided.

The need for space has been stressed in previous reports. The situation becomes more acute yearly. Unless provision is made for the continuing growth of the collections, the Museum cannot discharge its responsibility to the Nation.

COLLECTIONS

In summing up the work of this fiscal year it has been interesting again to note the steady inflow of valuable specimens as additions to our great collections in spite of war conditions. These have come mainly as gifts from interested persons, since our usual program of field work has been laid aside except where it has related to some activity concerned with the war. Small sets of natural-history specimens began to arrive in increasing number from members of the armed forces stationed throughout the world, bringing many

useful and interesting things. The total number of specimens received is somewhat larger than that of last year.

New material arrived in 1,159 separate accessions, with a total of 239,640 specimens, distributed among the five departments as follows: Anthropology, 852; biology, 229,546; geology, 3,466; engineering and industries, 1,388; history, 4,388. The increase has come in the fields of biology and history, the others showing slight decreases.

For examination and report 724 lots of specimens were received, covering all the fields embraced in our laboratories, an increase of 43 over last year. Part of these were returned to the senders when the examination was concluded, some were consumed or otherwise destroyed during identification, and some were presented as additions to our permanent collection.

Gifts of duplicates to schools, museums, and other institutions numbered 2,382 specimens. Exchanges of duplicate materials with other collections amounted to 10,634 specimens, and 726 specimens were transferred to other governmental agencies. Loans for scientific study to investigators outside Washington totaled 21,787 specimens. The summary of the collections given below has been adjusted to reflect additions and eliminations from the various series.

Anthropology	711,917
Biology	13,869,472
Geology	2,687,129
Engineering and industries	139,420
History	529,433
Total	17,937,371

EXPLORATIONS AND FIELD WORK

Under the auspices of the Division of Cultural Cooperation of the Department of State, Ellsworth P. Killip, associate curator of plants, visited Colombia during April, May, and June, spending some time in Bogotá for work with Dr. Armando Dugand and his associates upon large collections of Colombian plants recently assembled at the Instituto de Ciencias Naturales. From there he made brief field trips to Apulo and Pubenza, in the western part of the Department of Cundinamarca, and to Monserrate and Fusagasugá. Later he went to Popayán to join the ornithologist Dr. F. C. Lehmann V in an excursion to the Lehmann hacienda at La Capilla and to Páramo de Puracé. Mr. Killip's last 5 weeks were spent with Dr. José Cuatrecasas, Director of the Comisión de Botánica, Secretaría de Agricultura y Fomento, Cali, in examining the herbaria there and at the agricultural school, and in exploring the extensive mangrove swamps about Buenaventura Bay and on the delta of the San Juan River.

Philip Hershkovitz, holder of the Walter Rathbone Bacon Scholarship for 1941–43, returned to Washington in October after spending the better part of two years in Colombia, where he collected in the states of Atlántico, Magdalena, Bolívar, and Norte de Santander. The collection he amassed forms the largest single accession of mammals received by the Museum in the past 25 years.

In Colombia, also, M. A. Carriker, Jr., continued ornithological field work until October under the W. L. Abbott fund, his investigations in northeastern Colombia extending south into Norte del Santander. In November he brought to the Museum the results of

his past two seasons' work, one of the finest collections of birds that has been made in that area.

Dr. G. Arthur Cooper, curator of the division of invertebrate paleontology and paleobotany, in collaboration with Drs. Byron N. Cooper and R. S. Edmundson, of the Virginia Geological Survey, made an investigation of the relationships of the limestones occurring on the flanks of Clinch Mountain in southwestern Virginia and northern Tennessee. Considerable information on these valuable deposits was obtained. The work also furthered studies of those brachiopods that have a significant relation to the classification of the Middle Ordovician strata of the eastern United States. The investigations were made under the Walcott fund of the Smithsonian Institution.

Under the cooperative program between the Division of Cultural Cooperation of the Department of State and the Smithsonian Institution, Dr. Cooper continued study of the geological formations of northwestern Mexico with the assistance of Mexican geologists. He arrived in Mexico City on February 23, and after conferences with geologists in the Instituto Geológico de México, continued on February 28 to the field, accompanied by his collaborator of the previous year, Ing. Alberto R. V. Arellano. After a week's journey the party arrived in Caborca, Sonora, and there established headquarters for work in the desert. Investigation began in the hills northwest of the village and continued in the mountains to the southeast, south, and west, as well as in the vicinity of the village of Pitiquito. Eight days were spent at the mining camp of El Antimonio. On April 11 the party moved to the village of Altar, where sections were visited to the north, south, and east. Field work terminated on April 16. After about 2 weeks in Mexico City, partly devoted to conferences with Mexican geologists, Dr. Cooper returned to Washington, arriving on May 11.

The additional studies outlined have revealed that the Cambrian section extends into the hills northwest of Caborca for about 15 miles farther than previously known and have perfected knowledge of the structure of the Cambrian sediments from Caborca west to the Arrojos Hills, a distance of about 15 miles. In addition to the information acquired on the Cambrian, an enormous sequence of pre-Cambrian rocks was established, running from Pitiquito for many miles to the southeast. The same sequence was determined in several of the ranges south of Caborca. Work at El Antimonio led to the rediscovery of a zone of fusuline fossils, which will be important in establishing the geologic age of the related beds. It also led to the acquisition of more and better fossils from sections not fully covered last year and helped to establish a satisfactory explanation of the structure of the Permian rocks in this complicated area. The work around Altar was of necessity superficial, but during the limited time available a long sequence of Lower Cretaceous rocks was identified, constituting an addition to the geological column for this part of Sonora. The field work was supported in part by a grant from the Walcott fund of Smithsonian Institution.

Dr. W. F. Foshag, curator of mineralogy and petrology, while occupied in work on strategic mineral sources in Mexico, has had opportunity to make observations of the Parícutin Volcano.

During a 2-day trip, C. W. Gilmore, curator of vertebrate paleontology, accompanied by A. C. Murray, visited Plumpoint, Calvert County, Md., to collect a partial skeleton of a sirenian found by William E. Salter. The specimen proved to be the most complete skeleton of this sea-cow yet found in the Maryland Miocene rocks, as it consisted of the skull, ramus, 22 vertebrae, 39 ribs, both scapulae, both humeri, and sternal and fragmentary parts, all representative of a skeleton more than 10 feet long.

THE MUSEUM IN WARTIME

The halls of the National Museum continued to be of great public interest during the year, the total attendance of 1,532,765 visitors being an increase of 177,496 over those of the previous fiscal year. Through an actual tabulation made during the first seven days of each month, it was ascertained that approximately 40 percent of all visitors are men and women in uniform.

While the possibility of enemy attack on Washington became steadily less as the year progressed, measures for safeguarding our visitors, collections, and buildings continued in force. The Smithsonian air-raid defense organization remained in operation throughout the year under the direction of the general defense coordinator, F. M. Setzler. Six practice blackout drills were held at night, and two practice air-raid drills were held during the daytime.

As a result of a recommendation by the Smithsonian War Committee, a conference was held between officials of the Smithsonian Institution and the United Service Organizations, Inc., to organize a free guide service for personnel in uniform in the National Museum. In July 1943 a committee of U. S. O. groups within the city of Washington indicated their willingness to enlist the aid of their hostesses as volunteers for this docent service. Under the direction of F. M. Setzler, head curator of the department of anthropology, a route was established within the Natural History Building and a script prepared and mimeographed describing the exhibitions in the galleries selected for the tour. Since all the volunteer hostesses were employed during the week, classes for instructing them were arranged on Sunday afternoons, from August 22 to October 17, 1943, and on October 24 the first U. S. O. guide service for men and women in uniform was inaugurated. The individual groups were organized by a receptionist in the rotunda near the south entrance of the building. The first tour left at 11 a. m., and other small groups continued at 15-minute intervals until 3:30 p. m. Each tour, covering the exhibitions illustrating the various phases of geology, anthropology, and biology, required approximately 45 minutes. In order to fill vacancies among the hostesses as the work progressed, a second class was instructed during February 1944. During the 35 Sundays from October 24, 1943, to June 25, 1944, a total of 5,325 military visitors were escorted through the building, an average of about 152 people for each Sunday. The tours were suspended in July 1944.

These free Sunday tours for visitors in uniform were much appreciated by those men and women who participated. Many interesting and worth-while reactions were obtained, as indicated by the questions asked and the interest expressed concerning the various exhibition halls. Credit for the success of this service is due to the efforts of

the U. S. O. hostesses, to the excellent cooperation of the U. S. O. headquarters, and to the chairman and head receptionist, Miss Margaret Bledsoe. All have assisted in diffusing knowledge through the medium of the exhibitions.

Throughout the year the collections removed from our buildings as a safeguard were inspected regularly, and careful guard was maintained over them.

While progress in the prosecution of the war toward the close of the fiscal year modified some of the Museum's contacts with the war agencies, we may feel definite pride in the many calls made on us for data and information as well as for the various individual services rendered. These have extended to practically all the laboratories and offices in our organization. Scores of requests came for information on various kinds of animals and plants, these being concerned sometimes with identifications and sometimes with other specific data.

In the division of mammals, Dr. Remington Kellogg, curator, served as chairman of the American delegation at the International Conference on the Regulation of Whaling held at London during January 1944. At the request of the National Research Council, Dr. Kellogg undertook the preparation of text, keys, distribution maps, and illustrations of monkeys known to be susceptible to infection by malarial parasites, to aid in malariological studies in man. Officers of special Army and Navy Units, the staff of the Surgeon General of the Army, Office of Strategic Services, and the Division of Preventive Medicine and Surgery of the Navy, as well as members of the Inter-American Sanitary Institute and Pan American Sanitary Union, were furnished information relative to the distribution and identification of mammals involved in the transmission of diseases and, aided by our facilities and study collections, were given instructions regarding the identification of such mammals.

In the division of birds, Herbert G. Deignan, associate curator, assisted in work concerning maps and geographic names of the Far East and in a compilation of literature dealing with parts of that area.

In the division of reptiles and amphibians, Dr. Doris M. Cochran assisted the Surgeon General's Office in the preparation of lists of Asiatic reptiles. In the division of fishes, aid was furnished various agencies concerning dangerous, poisonous, and useful fishes, methods of fishing, sound-making fishes, and emergency fishing equipment.

In the division of insects, many identifications, particularly of mosquitoes, mites, and ectoparasites, were made for the Army and Navy, and the units submitting such material were also supplied with much information on the habits of the forms represented in the identified material. Assistance was given the Army Medical School and the National Naval Medical Center, as well as various Army and Navy training centers throughout the country, by supplying well-preserved material of insects and Acarina that are involved in human health problems. About 1,200 specimens were specially mounted on pins, and approximately 450 slide mounts were made for such training centers. During the year nearly 200 Army and Navy officers, who were being assigned to malaria survey or control units, or to other activities concerned with human-health problems, have received some instruction or other help from personnel of this division. The Division of Medical Intelligence of the Surgeon General's Office has been provided with detailed information on the medical insects

occurring in specific foreign areas. This information was placed on cards and the files were so organized as to permit their effective use.

At the request of the National Research Council, Dr. Paul Bartsch, curator of mollusks, served as a member of a committee charged with the preparation of a list of helminth parasites and their intermediate hosts of the Southwest Pacific. The list of known or suspected molluscan intermediate hosts was prepared in the division. Information regarding corals and coral reefs in the Bahaman-Caribbean region, as well as in the western Pacific, was furnished the Navy Department on several occasions.

In the division of plants, in addition to many minor inquiries from various war organizations, Dr. E. H. Walker, assistant curator, prepared an account of the emergency food plants of the Tropics. In the section of diatoms, in addition to supplying information regarding marine and fresh-water algae and examining samples of material involved in the fouling of ships, mines, and other marine structures, the associate curator, Paul S. Conger, prepared a bibliography covering the value of plankton as food.

Service in the department of anthropology included a wide variety of matters—identification of hallmarks on purportedly stolen foreign silver; suggestions for tropical and Arctic clothing; water supply and population statistics on Caribbean Islands; primitive weapons of Pacific and Indonesian peoples; Oceanian boats; Oceanian foods; fish pemmican in Micronesia; house types in Burma; degree of western influence in certain islands of the Pacific and in the Philippines; average stature of men and women of peoples of Europe, Africa, and Asia; photographs of Oceanian, Japanese, Chinese, and other Asiatic peoples; Hindu caste marks; Central American Spanish art; food supplies, containers, footgear, and leather products of North African peoples; footgear for aviators; primitive and European armor; musical instruments for rehabilitation of wounded soldiers; also a number of detailed projects dealing with the Philippine Islands and the islands of the Japanese mandate. Information based upon the department's collections was given also on the resources of certain strategic areas, and of the peoples or tribes inhabiting those areas, with a view to conserving space on ships bound for those regions. Of scarcely less importance was assistance given in the identification of tribal culture patterns, chiefly of the island peoples of the west Pacific area and of continental southeastern Asia.

The division of physical anthropology supplied the Office of Strategic Services with photographs of various eastern physical types. It also supplied detailed data on average body weight for Europeans and various peoples of the Far East to the Office of the Quartermaster General. The curator of physical anthropology, Dr. T. Dale Stewart, was released for a 6-months' furlough to the Washington University School of Medicine in St. Louis, Mo., to teach anatomy to Army and Navy medical students. The associate curator of archeology, Dr. Waldo R. Wedel, was detailed for special service to the Military Planning Division, Office of the Quartermaster General, War Department, from September 1, 1943, to March 1944.

In the department of geology, two members of the staff, in cooperation with the Geological Institute of Mexico, continued field studies in the economic geology of that country as a part of the war effort. Curator W. F. Foshag spent the year on detail from the Museum in a

continuation of the supervision of surveys for strategic minerals in Mexico. Dr. G. A. Cooper, similarly, spent three months in the field in Sonora concluding studies begun last year on the stratified rocks. The results, soon to be published, will be useful in the location of new mineral areas. Dr. Cooper also concluded field work on the project dealing with the subsurface geology of the Devonian rocks of Illinois, obtaining information for use in the oil development of that and neighboring States.

Members of the geological staff in the home office have been more occupied than ever before in furnishing information to the various war agencies. These services have included such diverse items as the preparation of analyses, assisting in selecting and grading calcite for the War Production and other Boards, editing a scientific volume for an allied country, and furnishing information of all kinds to an ever-increasing number of service men and women visiting the Museum.

Other services, especially from the department of engineering and industries, have included the following: Construction of two demonstration models of new ordnance devices for the National Inventors Council; transfer of a series of model buildings to the War Department, Corps of Engineers, Camouflage Section; information on revolving airfoils to the Technical Data Laboratory, Wright Field, Dayton, Ohio; furnishing photographs for Navy training films; identification of woods; information on properties and uses of woods for the Navy Department, War Production Board, Foreign Economic Administration, and Inter-American Development Commission; methods of preserving specimens of dehydrated foods for the War Food Administration; advice on disposition of hemp produced in Kentucky to the Commodity Credit Corporation; assistance in drawing up contract specifications involving a true lockstitch in sewing safety seams, to the U. S. Maritime Commission; suitability of palmyra fiber as a substitute for rattan for stiff brushes to the Navy Department; and aid in the training of document inspectors of the Federal Bureau of Investigation in identification of various printing processes.

VISITORS

The number of visitors to the Museum buildings during the year showed an increase of 177,496 over the previous year. The total number, 1,532,765, is, of course, far below the peacetime record of 2,408,170 in 1937–38, but the increase does indicate a salutary uptrend in the degree to which the National Museum exhibits and collections are being viewed and studied by the people even in wartime. August 1943 and April 1944 saw the largest number of visitors, 162,016 and 164,221, respectively, being recorded for these months. Table 1 shows the number of visitors to the various Museum buildings during each month of the year.

Since a considerable proportion of the visitors consisted of men and women in the armed forces, special services were proffered this group and every effort was made to enhance their visits. In the Natural History Building a program of Sunday docent service, for guiding parties through the Museum, was inaugurated. A number of women U. S. O. volunteers were especially trained to act as guides, and the "tours" conducted by them proved very popular. During the period

covering the last 35 Sundays of the fiscal year, over 5,000 members of the military personnel took advantage of this guide service. A fuller account of this program is contained elsewhere in this report. In the Smithsonian Building, information service for visitors was maintained. The information clerk handled 11,082 separate inquiries for information, distributed 2,427 soldier greeting folders, gave out 602 of the Smithsonian Institution historical brochures, and supervised a free-magazine table for service men and women. In the Arts and Industries Building, picture postcards of Smithsonian scenes were distributed free to men and women in uniform. Up to January 1944, when the special edition of these cards was exhausted, 50,000 sets (300,000 cards) had been so distributed by the Institution.

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1944*

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building	
1943					
July	26,445	46,576	43,973	16,100	133,094
August	33,389	59,715	49,449	19,463	162,016
September	23,664	45,033	38,186	13,487	120,370
October	26,782	49,434	43,552	14,397	134,165
November	22,460	41,301	43,103	12,666	119,530
December	15,348	26,907	27,098	9,026	78,379
1944					
January	21,478	39,519	35,385	12,712	109,094
February	21,670	38,374	36,360	12,269	108,673
March	22,549	45,907	36,692	12,926	118,074
April	31,466	67,254	46,822	18,679	164,221
May	26,625	51,385	45,598	15,318	138,926
June	29,336	55,091	47,021	14,775	146,223
Total	301,212	566,496	[1] 493,239	171,818	1,532,765

[1] Not including 3,684 persons attending meetings after 4:30 p. m.

LIBRARY

The experience gained in the first year and a half of the war enabled the staff of the Museum library to begin the past fiscal year better prepared to meet and to adapt its services and facilities to changed conditions. Unpredictable earlier, it was now possible to know not only the kind and character of many of the difficulties arising and of the changes of emphasis certain to continue for the duration but even to foresee others that must be met, and consequently to settle into a better stabilized wartime routine. From the point of view of work done for the war effort, under wartime conditions, the records show that the year was a good one.

The degree to which the library was used directly by various war agencies and by individuals in the armed forces was almost double that of the preceding year, and 520 requests for information came from these sources alone. Some of them were simple questions that could be easily answered, but many of them required considerable research. As was noted in last year's report, an interesting postwar story could be written about the variety of subjects covered by these

questions, and the surprising conversion to wartime uses of literature resulting from the most unwarlike pursuit of scientific investigations, especially in the field of the natural sciences.

No statistical record was attempted of the extensive use of the library made indirectly by the war agencies through the liaison of the Ethnogeographic Board.

In the library services to the curatorial staff of the Museum it was no longer possible to distinguish definitely between war work and nonwar work. Routine requests for books and bibliographical assistance were much the same in kind and number as in normal years. The difference lay in their purpose, since so many of the Museum staff not actually on war duty elsewhere were almost wholly occupied with war assignments needing their highly specialized knowledge.

There was little difference from last year in the accessions of books and periodicals. The number of periodical parts received both by purchase and by exchange fell off somewhat, but most of the still-continuing scientific serials from allied and neutral countries reached the library with gratifying regularity and with a minimum of loss of individual numbers.

Among the noteworthy acquisitions of the year were 120 volumes and 1,850 pamphlets on Cambrian stratigraphy from the library of the late Dr. Charles E. Resser, and 8 volumes and 750 pamphlets on beetles from the library of the late Dr. M. W. Blackman. As they have long been accustomed to do, many members of the scientific staff and other friends of the Museum generously gave copies of their own publications and other useful and important books and pamphlets.

The cataloging of currently received material was practically up to date at the end of the year, in spite of illness among the staff and a still-vacant cataloging position. The temporary services of a subprofessional cataloger helped considerably to prevent a mounting arrearage of current work that might otherwise have become difficult to reduce.

Again a generous allotment of funds for binding made it possible not only to send off newly completed volumes of periodicals to be bound but also to make some further inroads in the binding "backlog." Of the 1,951 volumes returned from the bindery, 900 were part of the 1,550 prepared and sent this year, while the rest had been sent toward the close of last year.

The physical condition and the appearance of the library were greatly improved by the completion of the extensive rearrangements undertaken to relieve the overcrowding of the shelves in the Natural History Building. So serious was the overcrowding that even after the transfer of about 2,000 volumes to the Arts and Industries Building there was little room for actual expansion, and almost every book in the stacks had to be shifted to make space in the right places for hitherto unshelved or improperly shelved books and periodicals. In the process, however, the shelves were read and put in order, and not a few "lost" books came to light. The provision of adequate room for future growth is still an unsolved problem.

Changes on the staff included the resignation of Mrs. Daisy F. Bishop, library assistant, on January 25, 1944, and the appointment of Mrs. Marie Boborykine to succeed her, on March 14. Mrs. Carmen G. Randall was given a temporary appointment as library assistant on September 30, 1943, succeeding Miss Ruth Newcomb, who served

from August 24 to September 6. Miss Marie R. Wenger was promoted to the position of librarian in charge of cataloging, and Mrs. Mary A. Baer was promoted to the position of librarian, continuing in charge of the Arts and Industries branch library. Samuel A. Jones was promoted from assistant messenger to messenger.

Statistics

Accessions of cataloged publications and bound periodicals	3,726
Volumes, pamphlets, and maps cataloged	4,794
Periodical parts entered	5,607
Cards added to catalogs and shelf lists	20,619
Volumes bound or rebound	1,951
New exchanges arranged	134
Circulation of books and periodicals (exclusive of intra-divisional circulation from sectional libraries)	10,310

The estimated number of volumes and pamphlets now in the Museum library is 230,693. Not included in this figure are incomplete volumes of periodicals and the large collections of pamphlets on special subjects in the sectional libraries.

PUBLICATIONS AND PRINTING

The sum allotted for National Museum publication requirements for the fiscal year 1943–44 was $43,000, the same amount as for the preceding year. This allotment was apportioned as follows: $30,000 for the printing of Museum Bulletins, Proceedings, and the Annual Report; $9,000 for binding; $4,000 for the salary of the Museum printer. Twenty publications were issued—the Annual Report, 4 Bulletins, 1 Contribution from the National Herbarium, and 14 Proceedings papers. The publications are listed on page 99. Volumes bound totaled 1,550.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 33,847 copies, while in addition 6,970 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

Early in the fiscal year, the Museum editor, Paul H. Oehser, brought to a close his work as editor of the Proceedings of the Eighth American Scientific Congress when volumes 10–12 of that series were published and distributed. This work had been in progress since 1941 in collaboration with the Division of International Conferences, Department of State. The editor continued also as chairman of the Efficiency Rating Committee of the Smithsonian Institution.

Indexing.—Notable advancement was made during the year on the comprehensive index to Museum publications, which has been in progress since 1933. With the exception of seven or eight annual reports, all volumes have now been indexed down to the year 1900. The index at present comprises approximately 235,000 cards.

The indexing of current volumes of Proceedings was kept up to date, indexes and tables of contents for three volumes (91–93) being published during the year. In addition to what time the editor and his assistant, Gladys O. Visel, were able to devote to the indexing work, considerable help was rendered during the year by Mrs. Marguerite W. Poole, information clerk.

Museum print shop.—F. W. Bright was detailed by the United States Government Printing Office, as in former years, to print labels and special forms at the Museum print shop, a branch of the Government Printing Office. Requisitions submitted for printing numbered 146, and Mr. Bright completed 131; in addition 7 that were submitted during the previous fiscal year were finished, a total for the year of 138. Seven of the 15 unfinished requisitions represent specimen labels involving long press runs and 8 cover large exhibition labels requiring much hand setting of type. With the exception of these, the work of the print shop is up to date.

PHOTOGRAPHIC LABORATORY

The Bureau of American Ethnology, the National Collection of Fine Arts, and the National Museum have continued their cooperative arrangement with the photographic laboratory. Under this the laboratory has made 3,205 negatives (including 120 microphotographs) 13,533 prints, 314 lantern slides, 2,060 enlargements, and 35 transparencies (including 13 in kodachrome). It has also developed 27 rolls of film, 5 film packs, 73 paper negatives, and 135 cut films. In addition it copied 1,049 pages in microfilm, mounted 624 prints, retouched 286 negatives, and cut 8 mats. Much of this work has been in connection with the preparation of illustrations for the Smithsonian War Background Series of publications, with the work of the Ethnogeographic Board, and other matters related to Smithsonian activities in the war effort.

Under a reorganization effected during the year the curatorial work on the photographic collections in the Museum, which pertains properly to the division of graphic arts, was separated on November 9, 1943, from the activities of the head photographic laboratory.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—Repairs to the service roadway around the Natural History Building, begun last year, were completed in October. Although these were only of an emergency nature, it is felt that they have put the roadway in very good condition and will furnish a perfect foundation when funds become available for complete resurfacing.

Most of the other building repairs were of a routine, maintenance nature and need no special mention. Painting, as usual, was the biggest item. The largest paint job completed was the repainting of the walls and ceiling of the "chapel" and ceiling of the west range in the Smithsonian Building. In progress at the close of the year was the painting of the exterior of the window frames and sashes in the west end of the Smithsonian Building, a rather difficult and lengthy procedure because of the complexity of some of these old windows.

Scrap-metal and paper salvage.—As a contribution to the war effort, the collection of scrap metal in Museum buildings was continued. During the year 2,350 pounds of junk metal and 1,250 pounds of salvaged tin cans were collected and delivered, respectively, to the Procurement Division and the District of Columbia Salvage Committee. More than 6 tons of waste paper were collected.

Heat, light, and power.—The steam used during the year for heating the various Museum buildings amounted to 63,445,800 pounds—about 8,500,000 more than for the previous year. All steam is furnished by the Government's Central Heating Plant. Electric current used amounted to 1,510,510 kilowatt-hours.

An important maintenance job completed in June was the rewiring of the tunnel from the Natural History Building to the Smithsonian Building, where through corroding the old conduit line had become hazardous.

Ice production.—Ice for the Museum's use manufactured by the refrigerating plant amount to 197.9 tons, at a cost of $1.15 a ton.

Air-raid and fire protection.—The usual weekly air-raid alarm tests, and periodic inspections and maintenance of water barrels, fire pumps, fire extinguishers, and other equipment, were made. The fire and burglar alarm systems functioned efficiently.

Furniture and fixtures.—Furniture added during the year consisted of 5 exhibition cases and bases, 287 pieces of storage, laboratory, and other furniture, and 2,426 drawers, boxes, and wing frames. Condemned and disposed of were 28 exhibition cases and bases, 120 items of storage, laboratory, office, and other furniture, and 166 drawers and boxes of various kinds. An inventory as of June 30, 1944, showed on hand: 3,522 exhibition cases, 20,368 pieces of storage, office, and laboratory furniture, and 116,466 drawers, boxes, and wing frames.

MEETINGS AND SPECIAL EXHIBITS

The Museum has continued its practice of making its auditorium and lecture-room facilities available for the use of scientific, educational, welfare, and governmental organizations and groups. Especially in wartime do such groups, particularly local ones, find it convenient to use these facilities for their meetings, and as far as possible the Museum is glad to assist in carrying out their programs. In all, 139 such meetings were held during the year in the auditorium and room 43, Natural History Building.

A series of 17 special exhibits were held during the year in the foyer and adjacent space of the Natural History Building. These, listed chronologically, were as follows:

July 1 to August 31, 1943: Exhibit of anthropological specimens from the Pacific area, from the Aleutian Islands through Micronesia and the Melanesian Islands, prepared by the department of anthropology.

September 1 to 30, 1943: Exhibit of photographs conducted by the National Photographic Society.

October 6 to 31, 1943: Exhibition of paintings by Zeferino Palencia, of Mexico, sponsored by Señor Dr. Don Francisco Castillo Nájera, Ambassador Extraordinary and Plenipotentiary of Mexico, and by the Pan American Union.

October 13 to November 1, 1943: Exhibit illustrating the theme "Bali—Background to War," prepared by the Museum of Modern Art, of New York.

November 1 to 30, 1943: Exhibit of wild-flower paintings, by Mrs. D. Werden Scott, of San Saba, Tex.

December 3, 1943, to January 3, 1944: Exhibit of water colors of Mexico by Walter B. Swann, of Omaha, Nebr., sponsored by Señor Dr. Don Francisco Castillo Nájera, Ambassador Extraordinary and Plenipotentiary of Mexico, and by the Pan American Union.

January 1 to 31, 1943: Exhibit of arts and crafts made by Service people in various U. S. O. centers throughout the country, sponsored by the United Service Organization.

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January 7 to 31, 1944: Exhibit of water colors and block prints by Ralph H. Avery, C. Sp. (P.), U. S. Navy.
February 4 to 27, 1944: Exhibition of paintings by John Mix Stanley, 1814–1872, his daughter-in-law Jane C. Stanley, 1863–1940, and her daughter Alice Stanley Acheson, of Washington, D. C.
March 1 to June 30, 1944: Exhibit of emergency rescue equipment, sponsored by the U. S. Coast Guard.
March 1 to 31, 1944: Exhibit of photographs illustrating the Belgian Congo at war. Photographs by André Cauvin, of the Belgian Information Center.
April 1 to 30, 1944: Series of photographs by members of the Army Map Service, entered in a contest by that organization.
April 1 to 28, 1944: The Carl Moon exhibit of Indian portraits. Gift, through the artist, of Mrs. Florence Rand Lang, of Montclair, N. J.
April 29 to May 3, 1944: Biennial art exhibit sponsored by the National League of American Pen Women.
May 2 to 29, 1944: Exhibit of portraits of leading American Negro citizens by Mrs. Laura Wheeler Waring, of Philadelphia, Pa., and Mrs. Betsy Graves Reyneau, of Washington, D. C.
May 3 to 31, 1944: Continuation of the Carl Moon exhibit of Indian portraits.
June 2 to 29, 1944: Exhibition of mural paintings from the caves of India, by Sarkis Katchadourian.

CHANGES IN ORGANIZATION AND STAFF

The year saw no major change in the organization of the National Museum, but some work was done in allocating positions to their proper grades under the Classification Act on the basis of the duties of each position.

Honorary appointments were conferred on Maj. Edward A. Goldman as associate in zoology, on August 1, 1943; Dr. Floyd A. McClure as research associate in botany, on April 21, 1944; Dr. J. B. Reeside, Jr., as custodian of Mesozoic collections, on June 19, 1944; and Clarence R. Shoemaker, as associate in zoology, on April 1, 1944.

In the department of biology, Dr. David H. Johnson, associate curator, division of mammals, was furloughed for military duty on November 15, 1943, and Dr. Richard E. Blackwelder, associate curator, division of insects, was furloughed temporarily for war work on August 23, 1943. Other changes were the resignation on March 22, 1944, of Walter A. Weber, assistant curator, division of birds; and the retirement of Clarence R. Shoemaker, associate curator, division of marine invertebrates, and of Julian S. Warmbath, taxidermist, the latter vacancy being filled by the promotion of Watson M. Perrygo on December 9, 1943. Under the section of diatoms, Paul S. Conger was appointed on March 9, 1944, as associate curator.

Through the death of Dr. Charles E. Resser, Dr. G. Arthur Cooper was advanced to the curatorship of the division of invertebrate paleontology and paleobotany, department of geology, on October 2, 1943, Miss Marion F. Willoughby, scientific aide, transferred to the U. S. Geological Survey on October 31, 1943.

In the department of engineering and industries, Dr. A. J. Olmsted, chief photographer of the Museum, was relieved of this position on November 9, 1943, and was placed in charge of the section of photography, which he so ably developed. Gurney I. Hightower succeeded Dr. Olmsted in charge of the photographic laboratory of the Museum, assisted by Floyd B. Kestner, on January 9, 1944.

Other changes on the administrative staff during the year were the retirement of Royal H. Trembly, superintendent of buildings and labor, who was succeeded by Lawrence L. Oliver, on December 10,

1943. Anthony W. Wilding was assigned to the position of property officer on December 21, 1943 by transfer from the Bureau of American Ethnology. The vacancy caused by the death of Miss Helen A. Olmsted, personnel officer, was filled by Mrs. Bertha T. Carwithen on February 1, 1944, and Mrs. Margaret L. Vinton was appointed personnel assistant on March 9, 1944.

Employees furloughed for military duty during the year were as follows: Robert L. Bradshaw, on October 12, 1943; Joseph R. Burke, Jr., on October 13, 1943; John Carl Carter, on May 5, 1944; Walter McCree, on April 3, 1944; and Dr. David H. Johnson, on November 15, 1943. Ernest Desantis returned to duty from military furlough on October 18, 1943.

Eleven persons were retired during the year through operation of the retirement act, as follows—Through age: William Rice, laborer, on September 30, 1943, after 15 years 3 months of service; Thomas J. Shannon, guard, on April 30, 1944, with 18 years 6 months of service; and Clarence R. Shoemaker, associate curator, on March 31, 1944, with 33 years 4 months of service. By optional retirement: Royal H. Trembly, superintendent of buildings and labor, November 30, 1943, with over 49 years of service; Bertie Turner, attendant, on November 30, 1943, with 32 years 6 months service; and Julian S. Warmbath, taxidermist, with 15 years of service. Through disability: Eugene C. Miller, guard, on December 9, 1943, with 6 years 1 month; Cecil R. Mulnix, guard, on March 31, 1944, with 13 years 7 months; Arthur G. Rodgers, guard, on November 10, 1943, with 8 years 5 months; Ann M. Stokes, laborer, on October 4, 1943, with 18 years 6 months; and Charles O. Watson, laborer, on April 5, 1944, with 35 years 3 months.

Through death, the Museum lost five employees from its active roll during the year: Dr. Charles E. Resser, curator, division of invertebrate paleontology and paleobotany, on September 18, 1943, after 29 years 5 months of service; Miss Helen A. Olmsted, personnel officer, on January 11, 1944, after 43 years 9 months; Benjamin F. Coe, guard, on March 1, 1944, after 25 years 5 months; George E. Matheny, guard, on July 20, 1943, after 24 years 6 months; and Cornelius S. Jones, laborer, on March 17, 1944, after 32 years 6 months.

From its list of honorary workers, the Museum lost by death on September 5, 1943, Dr. Aleš Hrdlička, associate in anthropology since April 1, 1942, and on February 22, 1944, Dr. E. O. Ulrich, associate in paleontology since June 9, 1914.

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Head Curator*)

ANTHROPOLOGICAL specimens continue to be used by investigators from military organizations and wartime agencies, those collections from remote areas and little known primitive peoples being especially significant. The greatly reduced staff has given priority to all requests from war agencies in supplying data and in preparing scientific reports related to certain theaters of war. The numerous requests from war agencies for well-documented specimens of a perishable nature emphasize the need for constant care in the preservation of such objects at all times. Even though field work has been held in abeyance for the duration of the war, the regular routine assignments, special exhibitions, and the reduction of backlog extend the efforts of the present reduced staff to the maximum.

From August 1943 to the end of the fiscal year the head curator directed the special guide service for military visitors, which was inaugurated through the cooperation of United Service Organizations, Inc., and the Smithsonian Institution. This activity is described on page 5. The head curator attended weekly conferences of the Committee on Personnel Utilization and the Committee on Workload; served as secretary of the Advisory Board of the National Park Service and attended a conference of the board in Chicago; and continued as general defense coordinator for the Smithsonian buildings on the Mall except the National Gallery of Art.

Dr. Waldo R. Wedel, associate curator of archeology, was detailed for special service as needed to the Military Planning Division, Office of the Quartermaster General, War Department, from September 1, 1943, to March 1, 1944. The curator of physical anthropology, Dr. T. Dale Stewart, was granted a furlough from July 1943 to January 1944 for the purpose of teaching anatomy to Army and Navy medical students at Washington University School of Medicine, St. Louis, Mo.

On September 5, 1943, the department, the Museum, the Institution, and the science of physical anthropology lost one of its most distinguished students when death came to Dr. Aleš Hrdlička in his seventy-fifth year. Even though he had retired from the active administration of the division of physical anthropology on March 31, 1942, Dr. Hrdlička continued unabated his researches up to within a few days of his death, and only death itself could stop him from his work. He was born in Humpolec, Bohemia, March 29, 1869, and arrived in this country with his parents at the age of 13. In 1903 he assumed charge of the newly created division of physical anthropology in the U. S. National Museum and spent the remaining years of his life in building one of the outstanding collections of human skeletal material. The more than 37,000 specimens in this division can rightfully be

credited to his vigorous and boundless energy. The studies and reports resulting from his world-wide travels, explorations, and laboratory analyses are represented by the more than 350 articles and books which he published. Moreover, the science of physical anthropology in America, to which he devoted the greater part of his life, is largely responsible to this one man. In 1918 he founded the *American Journal of Physical Anthropology*, and he was largely responsible for organizing the American Association of Physical Anthropologists, which was established in 1928. During his world travels he personally examined all the significant specimens relating to the skeletal remains of early man as known up to 1930, and his treatise on the subject made him the outstanding authority. Many societies and educational institutions recognized his untiring zeal and ability by honorary membership. He quite naturally assumed a proprietary interest in the field of physical anthropology, and at times seemed much more formidable than he actually was.

ACCESSIONS

The accessions assigned to the department during the year totaled 61. Only one division, archeology, exceeded the number of accessions received during the previous year. This reduction is no doubt a direct result of the country's effort in winning the war. Nevertheless we were forced to decline several private collections because of lack of space. The 61 accessions included four loans related to special exhibitions installed under the direction of the head curator. These consisted of "Bali: Background to War," "Arts and Crafts of Service People Made in Various U. S. O. Centers," "Emergency Rescue Equipment," and "Belgian Congo at War." Other accessions were assigned as follows: Archeology, 23; ethnology, 19; ceramics, 3; musical instruments, 1; period art and textiles, 9; physical anthropology, 2; totaling 852 specimens. The more important of these are described under the following divisions:

Archeology.—A collection of 115 lots of potsherds and other materials from various Indian sites, many of which are on or near the presumed route of De Soto's expedition of 1539–42 through the southeastern United States, were presented by Dr. John R. Swanton. Other materials include: 29 lots of potsherds from Indian village sites in Nebraska and South Dakota, excavated under the direction of A. T. Hill through the Work Projects Administration and the Nebraska State Historical Society; 65 lots of potsherds, chipped blades, and projectile points from sand-dune hearth areas in Dugway Valley, Tooele County, Utah, presented by Lt. Karl Schmitt, U. S. A.; a Tiahuanacoid pottery vessel from the Lake Titicaca region, Bolivia, donated by Mrs. William C. Davis. Two gold and silver book ends reflecting the Tiahuanacan style of architecture and sculpture, a gift from the Chamber of Commerce in Bolivia to Vice President Henry A. Wallace on the occasion of his visit to La Paz in April 1943, were presented by him to the National Museum.

Ethnology.—One major documented field collection, from the Huichol Indians of northern Jalisco, Mexico, was received as a gift from Col. Harry Stewart. This series of 159 specimens supplements previous collections from that tribe. It was made by Edwin F. Myers during a 3-months' expedition through the entire Huichol

region. Agustín Cossio, an educated Huichol, rendered valuable assistance to Mr. Myers but was later killed by a rebel band. Included are 23 excellent photographs showing the Huichol in their native environment and engaged in their daily activities, hand-woven poncho capes of wool and cotton and other weavings, hunting bows and arrows, objects of personal adornment, basketry, furniture (such as cradles and chairs), toys, charms, votive bowls and fetishes, gourd and pottery utensils, and musical instruments. Another important collection accessioned consisted of 26 large oil paintings of Navaho, Apache, and Pueblo Indians of Arizona and New Mexico by Carl Moon. These came as a gift of the late Florence Rand Lang, who generously financed a project for obtaining "an authentic picture record for present and future students, and all others interested in the American Indian." The paintings were made from color sketches and photographs obtained by Mr. Moon in the field between the years 1903 and 1917. A special showing of the paintings in the foyer of the Natural History Building was favorably received by the public and art critics. Through Charles P. Taft, the estate of Mrs. William Howard Taft, wife of the late President and first Civil Governor of the Philippine Islands, a collection of excellent examples of Moro and Indonesian brasses, which had been presented to Mr. and Mrs. Taft on various occasions, was given to the Museum. Included also is an excellent example of Philippine metal work in the form of a vase beautifully chased, decorated in relief, and inscribed "Al Honorable Gobernador Civil de Filipinas Mr. Wm. H. Taft en Recuerdo del Sangdugong Paiiagunip—Pedro A. Paterno. Manila 27 de Agosto de 1902." A collection of Chinese and Korean bronze mirrors presented by J. Morgan Clements is particularly noteworthy because of certain outstanding specimens. A Korean mirror included in the accession is identical in design and inscribed characters with a mirror in the Prince Yi Household Museum, Seoul, Korea. It is there identified as being of the Koryo period (A. D. 918–1391). The inscription reads *huang p'ei ch'ang t'ien*, or, in English, "the brilliant vast resplendent heavens." Included also was an example of Chinese knife money known as *ming tao*, the provenience of which is probably the Chao State, now a part of modern Shansi, Hopei, and Inner Mongolia. The coin may be classified as of the late Chou period, fourth–third century B. C.

Important accessions assigned to the section of ceramics consisted of a sugar bowl of French silver luster, originally obtained by Captains Lawrence and Tracy, of Steuben, Maine, coowners of a coastal schooner, from a French frigate off Boston Harbor during the latter years of the French and Indian war and presented by George V. Blue, a lineal descendant of Captain Tracy. Three vases and two bowls of Hollywood ware were received from the Santa Monica pottery of the California Art Products, Inc.

The section of musical instruments accessioned a B-flat clarinet made about 1870 by C. H. Eisenbrant, of Baltimore. This instrument, of rosewood, with 7 finger holes and 15 silver keys jeweled with brilliants, and inlaid with filigree silver, came as a gift from Miss Alice I. Siddall.

To the section of period art and textiles was transferred custody of the 95 objects of colonial American house furnishings on exhibition in the colonial room, off the ground floor foyer of the Natural History

Building. These specimens were collected and presented to the Museum by Mrs. Gertrude D. Webster in 1924. The room, including the wall paneling of American pine and the miscellaneous furnishings, has been recently reconditioned. A sixteenth-century Spanish colonial vargueno cabinet desk made of soft wood and veneered with a chocolate-colored walnut or mahogany was presented by Mrs. Graham Ker. Through a bequest from Miss Rebecca E. Everly a hardanger scarf and two doilies embroidered with butterflies, roses, and carnations, and edged with Battenburg lace, were received. Kate Session Marsh bequeathed 20 specimens of miscellaneous antique American and European laces, silver, and other objects of minor period art. Important specimens in the latter bequest are a cake basket of openwork silver, made by William Plummer, London, 1764–65; a chocolate pot of repoussé silver, made by Alice and George Burrows, London, 1816–17; and an icon of the Virgin and Christ Child, made of gold-washed silver, enamel, and pearls, bearing the town mark of Tule, Russia, year 1885.

INSTALLATION AND PRESERVATION OF COLLECTIONS

During the year six temporary exhibitions were installed in the foyer of the Natural History Building under the direction of the head curator, assisted by the other divisions in the department, especially Mr. Krieger and his staff in ethnology, and by the office of the superintendent. During July and August 1943 the Museum's anthropological specimens from the Pacific area extending from the Aleutian Islands through Micronesia and the Melanesian Islands were exhibited in the ten alcoves of the foyer. Of particularly timely interest were those illustrating island cultures of the Marshalls, Solomons (especially Guadalcanal), and Tarawa in the Gilbert Islands. In the Aleutian group emphasis was placed on the extensive archeological and ethnological material from the Island of Attu, from which the native Aleuts were removed or exterminated by the Japs. From October 13 to November 1, 1943, a special exhibition was installed entitled "Bali: Background to War." This exhibit, prepared by the Museum of Modern Art of New York City, has served as a visual aid for the regional training programs of the armed services. It displayed the use of Balinese carvings, paintings, and shadow-play puppets to illustrate the psychology of the natives on the Island of Bali. The exhibition was derived from the 2,000 native works of art and 30,000 photographs collected by the Bateson-Mead Anthropological Expedition. Early in January 1944 arrangements were made to display "Emergency Rescue Equipment" in a special section at the south end of the foyer. Final installation was made in March. Owing to the unusual interest to visitors, this special exhibition remained on view at the close of the fiscal year. It consists of such objects as balsa and inflated life rafts, sun still for purifying salt water, food bombs and their contents, various types of food rations, life preservers, signaling devices consisting of smoke bombs, water dyes, flags, and the emergency signaling mirror, fishing kits, light-weight exposure suit, and photographs illustrating the application of some of this equipment, as well as literature describing the use of the objects under a variety of conditions. The visitors' reactions to the display differ: Parents and relatives of persons in the armed forces are interested to see at firsthand

the precautions taken to prevent loss of life under emergency conditions; military visitors who have had some experience in the use of some of the equipment may either describe some of their narrow escapes or ignore the exhibit because it brings back memories of hardships. The objects were lent to the Institution originally by the Emergency Rescue Equipment Section of the Coordinator of Research and Development, U. S. Navy, later changed to Air Sea Rescue Agency, U. S. Coast Guard.

In January of this year a portion of the foyer was used to display arts and crafts made by Service people in various U. S. O. centers throughout the country. An interesting exhibition of paintings by Carl Moon was placed on display at various intervals from March to June 1944. These were developed from colored sketches made by the artist between the years 1903–1917, and depict various episodes in the daily life of the Navaho, Apache, and Pueblo Indians against a background of home life within the mountains and deserts of the American Southwest. Under the auspices of the Belgian Information Center the department supervised the installation of enlarged photographs illustrating the "Belgian Congo at War." These unusual pictures were made by André Cauvin, who spent a year in the Congo making a photographic record of the transition from a chaotic past into a new structure of contemporary cities and modern forms of armed warfare.

When the supervision of the colonial room was assigned to the department, considerable time was given to the cleaning of all specimens. The handsome wall paneling was cleaned and waxed, the floor painted, and black draperies hung from the top of the Museum walls in order to concentrate the attention of the visitor on the furnishings within the paneled room.

Archeology.—During the year several minor additions were made to the exhibits, but no major changes. The Museum-Gates collections of 1901 and 1905, principally from ceremonial caves in Arizona and New Mexico, were reexamined in preparation for revised exhibits. Several hundred specimens previously removed from exhibit were sorted and returned to their proper place in the study collections. The reference library for Old World archeology was placed in order, and its index cards were revised; a card index to archeological papers in the various Smithsonian Institution publications is in progress. As an example of the work involved in preparing archeological material for museum use, the under scientific helper devoted practically one entire man-year to marking pottery fragments and stone artifacts collected at Tres Zapotes, Mexico, by the Smithsonian Institution–National Geographic Society Expedition.

The death of Dr. A. Hrdlička on September 5, 1943, interrupted his review of the 12 collections he brought back from Alaska between 1926 and 1938.

Ethnology.—All current accessions have been cleaned, fumigated, classified, cataloged, and placed either on display or in classified study series. It has become more apparent during the present war emergency than was evident in normal years that an ethnological specimen may on occasion be found extremely useful to investigators. This observation pertains particularly to specimens originating outside the North American Continent. The staff has, therefore, made every possible effort to improve the classified study series from the Pacific

areas, from Indonesia, and from the Asiatic mainland. In this effort the laboratory of the department of anthropology has been of appreciable assistance, particularly in the cleaning, restoration, and repair of specimens from those areas so that they have been made available for purposes of study. Specimens collected 100 years ago by the U. S. Exploring Expedition from island peoples of the Pacific, as well as the many unique specimens from Indian tribes of the western plains collected by the U. S. Army between 1870–1880, were classified and housed in 45 standard and in 10 specially built cases by the senior scientific aide, Robert A. Elder, Jr., who devoted most of the past year in classifying, repairing, and fumigating these collections. The Museum's fumatorium has been in almost constant use by the division in connection with this work, wherein the division has received the active cooperation of the superintendent's office through the detail of laborers in the cleaning and moving of specimens. Ethnological collections long on exhibition in the displays of Korean, Chinese, Tibetan, and West Africa ethnology have been removed temporarily for fumigation. As indicated in the earlier part of this section, the staff in ethnology assisted in the preparation and installation of temporary exhibitions in the foyer of the Natural History Buildiug.

Physical anthropology.—Because of the death of Dr. Hrdlička, the 6-months' absence of the curator, Dr. T. Dale Stewart, and the military furlough of the associate curator, very few changes in the public exhibitions were made during the fiscal year. After the curator's return from Washington University School of Medicine, St. Louis, Mo., plans were made and carried out for the complete reorganization and redecoration of the division offices and laboratory. While these changes were in progress the divisional work that could be carried on was limited.

The material exhibited in the offices, laboratory, and third floor halls of the division was removed and rearranged in the course of reorganization. One exhibition case retained in the library section of the main office has been filled with memorabilia pertaining to Dr. Hrdlička. Two other exhibition cases in the adjoining offices were being filled at the close of the year with exhibits showing age changes in different parts of the human skeleton. Material of this nature is frequently needed for reference, especially in connection with identification work for the Federal Bureau of Investigation, and is difficult to locate in the general collections. These two cases will also serve as experimental cases for testing out new ideas for exhibitions.

Throughout the year the under scientific helper, Riley E. Mangum, was engaged in rearranging and relabeling the division collections. Within each geographical or tribal group the specimens are being arranged serially by catalog number, and all scattered bones brought together so as to make the individual skeleton the storage unit.

Anthropological laboratory.—The chief preparator, Andreas J. Andrews, supervised the modeling of a composite bust of an average young man, which was lent to the Reconstruction and Development Office, Office of the Quartermaster General, U. S. Army. A life-size model in natural color of head and shoulders of a young man was made, as a loan, for the Motion Picture Photographic Division, Navy Department. A portrait bust of the late Dr. Aleš Hrdlička was modeled. A death mask of Dr. Hrdlička was made for the Czechoslovakian Embassy, the piece-mold for which was retained in

the laboratory. The entire colonial-room exhibit was cleaned and the necessary repairs were made, including 50 new identification numbers. A life-size mannikin, two water-color illustrations, and several specimen supports were prepared for the special exhibition, "Emergency Rescue Equipment."

For the division of archeology several pieces of Mexican pottery and sculpture were repaired and restored. For the division of ethnology 90 pieces of American Indian pottery and a cooking pot from New Guinea were repaired and restored. Ten 5-inch lettered labels were made for the exhibition entitled "Specimens from the Various Islands in the Pacific." A Spanish chest from the year 1600, a 4-foot Chinese statue of Buddha, a large Chinese statue carved from wood, and several additional woodcarvings were repaired and restored. Three costumed life-size figures were repaired and cleaned. Repairs and treatment were given to 57 shields from Borneo, New Guinea, and New Zealand, 21 shields from Africa, two shark-tooth lined swords from the Marshall Islands, a wooden paddle from the Solomons, as well as miscellaneous baskets, blowguns, spears, bows, and harpoons from various primitive peoples. Repairs were made on the Zuñi Indian group, the Cocopa Indian family group, and the John Smith group.

The heroic statue of Alexander Agassiz was assembled, repaired, and given a green bronze patina, and the original model for the Statue of Liberty, by Frédéric Auguste Bartholdi, was repaired for the National Collection of Fine Arts. A piece-mold and two bronzed casts were made of a bronze Chinese Tang mirror for the Freer Gallery of Art. Two duplicates in natural color of a Mayeria Maga were made for the department of biology. Adjustments on a figure in the Period Costume Exhibit were made for the division of history.

Sr. Gregorio Hernández de Alba, of the Museo Arqueológico de Colombia, was instructed in the technique of restoring and mending pottery. Sr. Anibal Buitron, from Quito, Ecuador, was given instruction in the technique of restoring and mending pottery, mold-making, and the process of reproducing foliage in wax.

All sculpture throughout the building was kept in repair.

INVESTIGATION AND RESEARCH

To furnish the desired anthropological information requested by the various war agencies, the Ethnogeographic Board, and the Federal Bureau of Investigation has required considerable research on the part of the staff. Many specimens submitted to the department for identification through normal channels have required many man-hours. In addition, several manuscripts were prepared for publication. An article entitled "Archaeological Explorations in the United States, 1930–1942," by the head curator, was published in Acta Americana.

During the year 43 lots of specimens were assigned to the department for identifications and subsequently returned to the owners. A total of 647 letters were referred to the department requesting anthropological information. In addition, numerous identifications were made and information was supplied to the visitors coming directly to the offices of the various curators.

Archeology.—The curator of archeology, Neil M. Judd, completed three additional chapters of his report describing the material culture resulting from excavations he directed at Pueblo Bonito in Chaco Canyon, N. Mex. Upon his return from a six-months' detail to the War Department, the associate curator, Dr. Waldo R. Wedel, resumed study of the archeological material which he excavated in Kansas during 1939–1940. Dr. Wedel's report "Archeological Investigations in Platte and Clay Counties, Missouri" (with an appendix on "Skeletal Remains" by Dr. T. Dale Stewart), was published during the year as a bulletin of the National Museum.

Sr. Gregorio Hernández de Alba, chief of the Archeological Section, Ministry of Education, Bogotá, Colombia, and Sr. Anibal Buitron, of Quito, Ecuador, graduate student of anthropology and guest of the State Department, spent considerable time working on the archeological collections and acquainting themselves with our museum methods. Thirteen lots of archeological material were received for examination and report and subsequently returned to the senders.

Ethnology.—Through increased assignments in connection with temporary exhibitions and the general supervision of classifying and preserving specimens, little time remained for the curator, H. W. Krieger. Nevertheless his article "Island Peoples of the Western Pacific" was published as No. 16 of the Smithsonian Institution War Background Studies, and progress was made on the preparation of another number for the same series covering the ethnology of the outlying islands of the Japanese Empire, namely, Ryukyu Islands, Formosa, Karafuto, the Kuriles, and Bonin Islands.

Assistance by the division in the research work of outside investigators has been primarily through facilities provided them for examining specimens in the collections, the files of photographs, paintings, manuscripts and other documentary data, books from our library, and the indexed references of filed classified data. The demand by individual correspondents and visitors for photographs from our negative files and for new photographs of specimens is steadily increasing. This involves the assembling of appropriate pictures for selection, as well as of specimens to be photographed, and the identification and captioning of the prints.

Governmental departments and agencies used the division resources continuously throughout the year. Many classes of specimens were examined and sketched. The division library was combed for every scrap of information constructive to the war effort.

The study of ceramics, silver, glass, and pewter is of never-failing interest to the public and involves time and some research on the part of the division staff in collecting data for visitors and compiling information for distribution to interested correspondents. Personal interest in the identification of privately owned collections of laces, embroideries, musical instruments, silver, pottery—in fact, the entire gamut of antiques—survives robustly as a war time hobby. Visitors and correspondents reveal an increasing interest in the care and preservation of treasured antiques and of family heirlooms. This frequently results in requests for advice regarding technical methods of repair and preservation. Inquiries regarding hallmarks on silver, and maker's marks generally, require considerable time in providing answers. It has been observed that during periods of war-loan drives requests for information as to suitable markets for family heirlooms and

antiques markedly increase. The number of requests for available literature on the division's collections reveals a growing public demand that such literature be prepared for distribution as requested.

Twenty-eight written reports were made pertaining to the examination and identification of a total of 108 specimens for private individuals as compared with 18 written reports covering a total of 41 specimens for the preceding year.

Physical anthropology.—During his furlough for teaching at Washington University School of Medicine, St. Louis, Mo., studies were carried on by the curator, Dr. T. Dale Stewart, on age and sex changes in the human skeleton. This was possible because the skeletal collections preserved in the department of anatomy were obtained from the dissecting rooms and therefore were accurately identified. The experience gained in handling this material is proving useful in studying the unidentified specimens in the division. In the course of this work the curator took the opportunity also of studying arthritic changes in the skeleton. The decision to study this subject is explained by earlier observations on this feature in the Eskimo and Indian skeletons in the National Museum. Here again, since arthritis is closely correlated with age, it was hoped that the university's identified material would aid in the interpretation of the condition in the groups where exact age is unknown. In addition to his work at the University, several evenings were given to studying the Indian skeletons excavated in Illinois by Dr. P. F. Titterington, a St. Louis physician. Two cultural horizons are represented by these Indian remains, the Hopewell and the Jersey County bluff focus of the Middle Mississippi. After his return to Washington Dr. Stewart prepared a paper on "Filed Indian Teeth from Illinois," based also on material in the collection of Dr. Titterington.

Up to the time of his death, Dr. Hrdlička continued to analyze his data on the human tibia. The year also saw the publication of the seventh and last part of Dr. Hrdlička's "Catalog of Human Crania in the United States National Museum Collections," this number covering the non-Eskimo people of the Northwest coast, Alaska, and Siberia. This series of catalogs in all presents measurements of more than 7,500 non-White crania and has been described as constituting "one of the most valuable sources of basic anthropometric data in existence."

The curator, Dr. Stewart, furnished a report on a skeleton discovered in Texas by Dr. Cyrus Ray and investigated in situ by Dr. Frank H. H. Roberts, Jr., of the Bureau of American Ethnology. This specimen afforded an opportunity to make a reconstruction of the skull from relatively few fragments. Aided by the Schwarz stereograph possessed by the division, it was possible to approximate the original shape of this skull in a manner that would not otherwise have been possible. On several occasions the curator aided in the identification of skeletal remains brought in by agents of the Federal Bureau of Investigation. In most of these cases the Bureau had received fragments of burnt bone obtained from furnaces or stoves where murder was suspected.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

During the year the department distributed 242 items, including a plaster cast bust in natural color of a young man approximately 20

years of age, to the Motion Picture Division, Photo Science Laboratory, U. S. Naval Air Station; the cast of a Neanderthal child recently discovered in Uzbekistan, Central Asia, loaned to Dr. Franz Weidenreich; gifts to the William T. Hornaday Foundation and the Children's Museum in Washington, together with photographs and transfers to other government bureaus, schools, and colleges for exhibitions and educational purposes.

NUMBER OF SPECIMENS UNDER DEPARTMENT

On June 30, 1944, the department of anthropology was credited with a total of 711,917 cataloged specimens, which represents a net increase of 800. The following summary indicates the distribution of specimens as assigned to the various divisions and sections within the department:

Archeology	479,786
Ethnology	182,748
Ceramics	7,585
Musical instruments	2,414
Period art and textiles	2,254
Physical anthropology	37,130
Total	711,917

DEPARTMENT OF BIOLOGY

(WALDO L. SCHMITT, *Head Curator*)

WITH pardonable pride we may review this department's participation in the present war, both in men and special knowledge or information furnished and in contributions to the scientific, esthetic, and economic life of the Nation.

Dr. Remington Kellogg, curator of mammals, served as chairman of the American delegation to the International Conference on the Regulation of Whaling held in London during January. Also, at the request of the National Research Council, for the Board for the Coordination of Malarial Studies, and in collaboration with Maj. E. A. Goldman of the Fish and Wildlife Service, Dr. Kellogg prepared the first of a series of descriptive accounts of the kinds of monkeys that may carry malarial infections. Dr. Paul Bartsch, curator of mollusks, worked in close cooperation with a special committee of the National Research Council, in preparing a list of known or suspected molluscan intermediate hosts of human parasites. In connection with the preparation of survival manuals, Dr. L. P. Schultz, curator of fishes, and Earl D. Reid, scientific aide, demonstrated to members of the U. S. Navy the use of derris root for securing fish for food in emergencies.

Dr. David H. Johnson, associate curator of mammals, commissioned lieutenant (jg), U. S. N., left in May for special service with a medical unit. S. Dillon Ripley and H. G. Deignan, assistant and associate curators of birds, respectively, were granted military furloughs for special missions. Dr. R. E. Blackwelder, associate curator of insects, also is still on furlough, in work concerned with the war. Dr. J. P. E. Morrison, assistant curator of mollusks, has been on a special detail concerned with work of the war since February. Seven entomological collaborators and specialists from the staff of the Bureau of Entomology and Plant Quanrantine located in the Museum have been serving with the Sanitary Corps of the Army in the Pacific area and on the home front for periods ranging from eight months to two and a half years.

Under the auspices of the Division of Cultural Cooperation of the Department of State, Ellsworth P. Killip, associate curator of plants visited Colombia during April, May, and June for consultations and work in botanical centers in Bogotá and Cali.

All divisions carried as heavy a work load this year as last, furnishing special information on a great variety of subjects and indentifying a constant stream of animals and plants for various units of the armed forces and other agencies concerned both directly and indirectly with the war. Identifications and information centered around organisms involved in the transmission of disease, their distribution over the world, their life histories, their habits, and frequently the remedial measures that should be taken to overcome them. Other

inquiries concerned poisonous or otherwise noxious animals and plants, emergency foods, sources of new or increased food supplies, and strategic and substitute raw materials of plant or animal nature needed in prosecuting the war or sustaining civilian economy.

All divisions in the department contributed to the Navy's booklet "Survival on Land and Sea," published in December, to "A Field Collector's Manual in Natural History," recently issued by the Smithsonian, and to the preparation of nine mimeographed leaflets for distribution to correspondents inquiring about the animal and plant life of the Southwest Pacific. Austin H. Clark, curator of echinoderms, published "Iceland and Greenland," the fifteenth of the Smithsonian's War Background Studies, and in collaboration with Dr. E. H. Walker, assistant curator of plants, prepared material for the biological section of another volume of this series dealing with the Aleutian Islands.

While on vacation in Illinois, Dr. R. I. Sailer, of the U. S. Bureau of Entomology and Plant Quarantine, working at the Museum, collected more than 2,000 specimens of Hemiptera, since added to the national collections. About 500 Diptera collected by Dr. M. T. James of the same Bureau during a vacation spent in Colorado also were added to our collections. Other specialists of the Bureau located at the Museum accomplished considerable collecting in the vicinity of Washington, D. C., assembling a surprisingly large amount of material, principally Ichneumonidae, Aleyrodidae, and miscellaneous Heteroptera and Diptera. In addition to the Aleyrodidae taken in the field, other sizable collections of this family were obtained from the National Herbarium. Certain groups of preserved plants examined for specimens of Coccidae and Aleyrodidae in connection with an African problem yielded more species of Aleyrodidae than had been known previously from all Africa.

ACCESSIONS

The 760 accessions recorded for the year exceeded the previous year's total by 56. The number of specimens received was also greater, totaling 229,546 specimens in all. One accession, the Albert Mann Diatom Collection, received as a gift from the Carnegie Institution of Washington, alone approximated 18,000 specimens of various kinds, chiefly mounted slides of diatoms. In combination with the existing national collections, this gives the National Museum one of the world's leading diatom collections. This and other important accessions are listed below by divisions.

Mammals.—The largest single collection of mammals received in the last quarter of a century consisted of a large series, about 2,400 specimens, of both small and large mammals from the departments of Atlántico, Magdalena, Bolívar, and Norte de Santander, Colombia, collected by Philip Hershkovitz, while holding the Walter Rathbone Bacon Traveling Scholarship of the Smithsonian Institution. Other smaller but also important accessions include the following: A beaked whale fetus measuring about 7 feet in length, the largest in the national collections, taken at Cape Hatteras, N. C., and presented by the North Carolina State Museum; three transfers from the Navy Medical School consisting of 24 mammals from Georgia and Florida, 98 rats and mice, and 2 mongooses from the Pacific, of interest because they come from areas from which the Museum has practically no

material; a skin and skull of a whitetailed deer from the Virgin Islands from Harry A. Beatty; 17 mice, 1 mole, and 1 muskrat from Grosse Isle, St. Lawrence River, Quebec, a hitherto unrepresented locality, from Capt. James A. Baker; 76 small mammals from Bolivia, of which 42 were collected by Dr. Raymond Gilmore and 34 were forwarded by Dr. Roberto Cors Medina, Servicio Nacional Antipestoso, La Paz, Bolivia; 20 mammals from the National Zoological Park; 624 mammals from various North American localities from the Fish and Wildlife Service, comprising the second largest accession of the year.

Birds.—Aided by the W. L. Abbott fund of the Smithsonian Institution, M. A. Carriker, Jr., added 3,281 specimens from Colombia to the Neotropical bird collection, giving the Museum a reasonably complete representation of the bird life of northern Colombia. From Brother Nicéforo María, of Bogotá, gifts totaling 85 birds were received from parts of Colombia not visited by Carriker. Other additions include the following: From the American Museum of Natural History 20 birds hitherto unrepresented in the study series, including a genus, *Drepanoptila*, new to the collection; from Lt. E. W. Pfeiffer, U. S. Marine Corps, 37 birds, including some forms new to the collections, from Recife, Brazil; from Pvt. Hugh Birckhead, U. S. A., 13 specimens from North Africa; from W. H. Phelps, of Caracas, Venezuela, two skins of a Venezuelan warbler, *Myioborus miniatus ballux*, of which one, the type, is placed on deposit. By exchange there came two skins of a Texas red-shouldered hawk, *Buteo lineatus texanus*, new to the collection, from the Museum of the Louisiana State University, and from the Departamento de Zoologica, São Paulo, Brazil, a specimen of the genus *Coryphaspiza*, also new to the collection. Sixty-eight skeletons, nine skins, and three alcoholic specimens were received as a transfer from the National Zoological Park.

Reptiles and amphibians.—As a result of exchanges undertaken with other institutions, a number of unrepresented, or poorly represented, species of amphibians have been added to the collections as follows: From the Museum of Zoology, University of Michigan, paratypes of 13 frogs and specimens of 125 frogs and 24 salamanders; from the Museum of Comparative Zoology, Harvard University, 13 paratypes and 50 other specimens of frogs. As gifts there came 356 salamanders, frogs, lizards, and snakes from the Great Smoky Mountain National Park from Lt. (jg) Willis King; about 400 specimens of frogs from Jamaica, lizards and frogs from Honduras, from Dr. W. Gardner Lynn; about 60 turtles, lizards, snakes, and frogs from Philip Hershkovitz, incumbent under the Walter Rathbone Bacon Traveling Scholarship; 28 frogs from the New York Zoological Park through Dr. William Beebe; and 69 turtles from the Tennessee Valley Authority through Dr. Clarence M. Tarzwell.

Fishes.—Exchanges consummated during the year brought much valuable ichthyological material to the Museum, most of it new to the collections, as follows: From the Museum of Comparative Zoology, 321 cotypes; from the American Museum of Natural History, four paratypes of *Characidium marshi* Breder; from the Chicago Natural History Museum, a paratype of *Gobiesox paradiseus* Herre, besides 14 other specimens of Venezuelan fishes. Other species new to the collections received as gifts include a cotype of *Geophagus magdalenae* Brind, from A. J. Deering; from Dr. William Beebe, holotypes of the

Venezuelan fishes *Hypopomus beebei* Schultz and *Corymbophanes venezuelae* Schultz; from Hugh H. Iltis, *Priacanthus bonariensis* and *Sphaeroides pachygaster*, together with 17 other well-known species from off Cape Henry, Va.; and from the National Geographic Society, collected by Luis Marden, three large specimens of the fresh-water shark *Eulamia nicaraguensis* from Lake Nicaragua, the type locality, new to the collections, and 173 other specimens mostly from Lakes Nicaragua and Managua and from El Salvador.

Insects.—The vital and significant role played by entomology and entomologists in the war is reflected in the host of mosquitoes and mosquito larvae that have been received by the Museum from the Sanitary and Medical Corps of the armed forces, about 10,000 specimens all told, comprising a collection of these forms from the south and southwest Pacific probably not equaled anywhere else in the world. Other important accessions of insects include the following: More than 3,000 specimens of bees from all parts of the world, including some type material, presented by Dr. T. D. A. Cockerell; nearly 4,000 butterflies of the family Lycaenidae, including 37 holotypes and 160 allotypes and paratypes, a gift from W. D. Field; 2,000 Hemiptera, including 3 holotypes, from Dr. S. B. Fracker; comprehensive collections, chiefly insects collected by the donor, Maj. D. Elmo Hardy, in India; 57,000 miscellaneous insects selected by workers of the Bureau of Entomology and Plant Quarantine from material received for identification during the year.

Marine invertebrates.—Gifts of type material were received in seven of the year's accessions and include: Types of two new species of crayfish from Dr. Horton H. Hobbs; the type of a new species of rhizocephalid from Dr. E. G. Reinhard; holotypes and allotypes of 10 new species of crayfishes from Dr. Rendell Rhoades; holotypes, allotypes, and paratypes of six new species of ostracods from Dr. C. Clayton Hoff; five slides of Foraminifera carrying paratypes of a new species from David Nicol; and the type and paratypes of a new polyclad worm described by Dr. Libbie Hyman, from Dr. C. H. Edmondson. A notable northward extension of the range of a tropical west American marine crab is represented by a specimen of *Euphylax dovii* taken in Monterey Bay and presented to the Museum by the Hopkins Marine Station through Dr. Rolf L. Bolin. Especially worthy of note is the fact that during the last year 6 accessions, totaling 2,380 specimens, collected by men in the armed services have been donated by them to the national collections. For these, in many cases rare, specimens the Museum is indebted to the following: Maj. D. Elmo Hardy, San. C., U. S. A., India; Ensign Donald R. Johnson, Malaria Control, U. S. N. R., North Carolina; Sgt. Joel Martin, U. S. A., South Pacific; Sgt. Milo W. Williams, U. S. A., Mississippi; Sgt. James E. Hadley, U. S. A., New Guinea.

Mollusks.—The Museum's collection of Mexican land shells was materially enhanced by three gifts, totaling 1,490 specimens, received from Miss Marie E. Bourgeois. Other Mexican material collected by Dr. G. A. Cooper, of the department of geology, includes 1,145 shells and 67 brachiopods from Sinaloa, Sonora, and Veracruz. Dr. E. A. Andrews, who had built up the largest known collection of Jamaican representatives of the family Neritidae, presented the entire 51,000 specimens and accompanying 850 microscope slides to the Museum. Other notable accessions included 1,200 Trinidad shells from Samuel

P. Archino; 31 specimens, representing 25 species, from Dr. R. G. Fennah, entomologist to the Agricultural Advisory Department of Trinidad; 84 Colombian mollusks donated by Brother Daniel, of Medellín; 150 marine shells from Mississippi, collected by Sgt. Milo W. Williams; and 238 land and fresh-water mollusks from the U. S. Public Health Service, through Dr. Eloise B. Cram.

Helminths.—Valuable accessions in the form of gifts of type material came to the helminthological collections as follows: From Dr. Eduardo Caballero y C., three cotypes of *Ochoterenella digiticauda* and a cotype of *Choledocystus intermedius;* from Lt. (jg) N. Z. Frayne, D. C., the type specimen of *Choricotyle reynoldsi;* from the Illinois State Academy of Science, types of *Diphyllobothrium oblongatum* and *D. crenatum;* from Dr. Harold W. Manter, three slides containing four specimens, including type and paratype of *Hexostoma macranthum* and type of *Cyclocotyla hysteroncha;* from Carl Cecil Riguey, nine slides of cotypes of *Raillietina centuri.*

Corals.—Twenty recent corals, collected by Dr. Hollis Hedberg, were presented by Dr. John W. Wells, and 12 from Trinidad by Samuel P. Archino.

Echinoderms.—Among the 89 echinoderms accessioned during the year were six specimens of an undescribed species from Hawaii received from Dr. Charles A. Ely, six paratypes of new ophiurans described by Dr. Hubert Lyman Clark, and two interesting abnormal starfish from Dr. Walter K. Fisher.

Plants.—Though the actual number of botanical accessions was slightly less than last year, the 36,240 plants received included 2,000 more than the year previous. Largest of the more important accessions was the Chickering Herbarium of approximately 10,550 specimens, presented by the Columbia Institution for the Deaf (Gallaudet College). This herbarium, formed by the late John White Chickering, Jr., mostly during the long period of his association with the college, was acquired some time after his retirement from teaching in 1900. It is a valuable addition to the National Herbarium, since it includes much historically important material belonging to collections previously not at all or scantily represented; for example, the early collections of E. L. Greene in California, New Mexico, and Colorado, of J. F. Joor in Texas and Louisiana, and of T. J. Hale in Wisconsin. The collection is of special local interest also as containing Professor Chickering's own material from the District of Columbia, of which a great deal was collected in plant habitats now destroyed. The larger part of the herbarium consists of mounted specimens. Other noteworthy gifts include 3,279 specimens from Venezuela, coming largely from little-known regions, presented by Prof. Henry Pittier; 2,052 specimens of Venezuelan plants collected for the Museum by the associate curator, E. P. Killip; about 2,500 specimens of bamboos from tropical America, including an unusually good representation of vegetative structures important in the field identification of the bamboos, collected for the Museum by Dr. F. A. McClure, research associate in botany; 1,421 specimens from Colombia, collected by the donor, Oscar L. Haught; 539 specimens of grasses, mostly from Australia, presented by Mrs. Agnes Chase, custodian of grasses; about 1,000 specimens from Virginia and West Virginia, presented by H. A. Allard; 261 specimens from the little explored west-central mountain region of Puerto Rico, containing a number of ferns hitherto not

known from the Island, presented by F. H. Sargent; 315 specimens from Hawaii and the western United States, presented by Otto Degener; 538 specimens from Maryland, presented by E. C. Leonard, assistant curator; 430 specimens, mostly from Brazil and Panamá, presented by E. P. Killip, associate curator.

The Albert Mann Diatom Collection, consisting of approximately 8,000 slides of mounted specimens, in excess of 10,000 samples of crude diatom material, and over 200 negatives and 300 lantern slides, was formally accessioned on March 21 as a gift from the Carnegie Institution of Washington. The Albert Mann Collection is the most important single addition ever made to the nation's collection of diatoms, about doubling it in size and so extending its scope that it takes its place among the world's foremost collections of these organisms.

INSTALLATION AND PRESERVATION OF COLLECTIONS

In the course of the continuing task of cleaning and renovating the biological specimens on public display, occasion was taken to rearrange and otherwise improve the exhibition series of European, Australasian, Asiatic, and African mammals. By removing duplicates and deteriorated specimens, mounting all arboreal animals on suitable limbs, removing all old wooden bases, grouping the animals in geographical sequence, sanding the floors of all cases, and, finally, washing all glass inside and out, the exhibits in the south hall, except for the labels, appear as newly installed. A lack of uniformity in style in the labels is to be remedied at the first opportunity. The Museum's exhibit of hummingbirds is being completely overhauled. New specimens are replacing old faded ones, and fluorescent lighting is being installed. Two large, handsomely mounted sharks, donated by Michael Lerner, were placed on exhibit in the fish hall on the second floor. A few specimens, such as the Neptune's cup sponge for which many visitors inquire, were added to the invertebrate exhibit.

Although any general overhauling or reconstitution of the departmental exhibits must await the end of the war, the curators in a series of discussions participated in by various members of their staffs and the chief taxidermist have drawn plans designed to make the most effective use of available space and existing exhibits. At the same time, models were constructed to present graphically the subjects chosen for visual demonstration. The proposed vertebrate exhibits were suggested by Dr. Wetmore, Dr. Herbert Friedmann, A. H. Clark, Dr. Doris Cochran, and Walter A. Weber, and modeled by Mr. Weber, Mr. Clark, and Dr. Cochran; the proposed invertebrate exhibits were planned and modeled by Mr. Clark and Dr. E. A. Chapin. Descriptive matter accompanying the models was prepared by Dr. Friedmann and Mr. Clark.

Mammals.—In common with other divisions of the department, one of the most pressing problems is shortage of storage space. This condition hinders the orderly expansion of the study collections, adds to the burden of their care and study, and retards identification of new material. All the material is properly indexed but in a number of cases difficult of access. No special work was done on the alcoholic collections except the routine filling of jars and tanks with alcohol as necessary.

Birds.—The rearrangement, reidentification, and labeling of the study series of bird skins were continued, the following families being covered in part or whole: Eurylaemidae, Dendrocolaptidae, Furnariidae, Conopophagidae, Rhinocryptidae, Cotingidae, Pipridae, Tyrannidae, Oxyruncidae, Phytotomidae, Pittidae, Xenicidae, Phileptittidae, Menuridae, Atrichornithidae, Alaudidae, Hirundinidae, Campephagidae, Dicruridae, Oriolidae, Irenidae, Tetraonidae, Phasianidae, and Cracidae, comprising 42 quarter-unit cases and 24 half-unit cases. During the first half of the year the associate curator, H. G. Deignan, spent considerable time in checking over the collection for possible types and in correcting labels on specimens with insufficient or misleading data. The evacuated material has been checked, poisoned, and found to be in excellent condition. All material received during the year has been identified, at least to species, for catalog purposes. Substantial additions were made to the card catalog of published colored pictures of birds. Under the supervision of the curator, Dr. E. M. Hasbrouck, carrying on volunteer work in the division, and the scientific aide, J. S. Webb, began a complete rechecking of the collection of the birds of North America, listing especially all gaps in the series, not only of forms unrepresented, but of plumages (sex, age, and season) needed to round out the collection, and of forms of which no topotypical material was available. This information will facilitate arranging exchanges and suggesting other ways of filling these gaps in order to increase the usefulness of the collection. The study collection of the Fish and Wildlife Service was extensively rearranged and expanded by its curator, Dr. J. W. Aldrich.

Reptiles and amphibians.—The dried turtle collection, which was returned to the division following the death of Dr. Stejneger, has been entirely rearranged so that all specimens may be readily located. The card catalog being made of this collection is about half completed. The processing and cataloging of all incoming material are up to date. The backlog of unidentified material in the collection is being steadily reduced to an almost negligible figure. Exchanges involving duplicate specimens have not greatly relieved the overcrowded condition of the alcoholic stack, as the desired material received in return required about as much space as was occupied by the distributed duplicates. Four half days a month of the time of a laborer are devoted to the care of the evacuated alcoholic types of the department. These collections continue in first-class condition.

Fishes.—The alcoholic storage in the division of fishes is about taxed to capacity, with the result that the 45,000 specimens transferred from the Fish and Wildlife Service last year are still on shelves in the offices. By rearranging shelves and family jars in the stack, enough space was gained to care for current accessions and for the anchovies worked up by Dr. Hildebrand. The 12 families of South American catfishes and the family Characinidae were also rearranged to accommodate the intercalation of the 18,262 Venezuelan fishes worked up by the curator. The identification of unworked fishes accumulated from past years is being energetically continued. A careful estimate shows about 400,000 fishes either uncataloged and therefore unavailable for comparison or as yet unincorporated in the classified series. Except for some large accessions, the general routine of identification, counting, cataloging, bottling, labeling, and filing and refiling of jars is current. Wooden barrels have been found to be unsatisfactory for

holding fish and are being replaced with other containers as they become available. The present status of the collection is satisfactory except for the crowded condition of the stack.

Insects.—Of the groups of Scarabaeidae and Coccinellidae in direct charge of the curator all the material of the genus *Pinotus*, family Scarabaeidae, was reidentified and placed in systematic order. The addition of a new double room on the second floor greatly increased the working facilities in the section of Hemiptera, making it possible to rearrange the cutworm moths, family Phalaenidae, in the space formerly occupied by the Hemiptera. Because of the heavy load of service work and lack of personnel, it has been impossible, for the present at least, to continue with the segregation of holotypes begun in 1942. Work on the Lepidoptera was discontinued before the end of the last fiscal year, and, although resumed early in 1944, it was again dropped when Mr. Field was inducted into the Army in December.

The Nearctic collections of Orthoptera are on the whole well arranged and identified, but the exotic material is largely unstudied. During the year, however, both the Nearctic and exotic Blattidae, Mantidae, and Phasmatidae were put in good condition. The Dermaptera were studied and completely rearranged. All the order Embioptera was recently identified by Capt. E. S. Ross. The working collections of Nearctic Odonata, Plecoptera, Megaloptera, Mecoptera, and Neuroptera are moderately well named and for the most part reasonably well arranged. The Trichoptera and exotic Odonata are mostly unworked, the latter being unavailable for study. Parts of the alcoholic collections were gone over during the year and put in good order.

The entire collection of coleopterous larvae, which is probably the best of its kind anywhere, is in excellent condition and on the whole very well arranged. Dr. A. G. Böving redetermined and rearranged all the material belonging to the Anobiidae, and Dr. W. H. Anderson expanded, relabeled, and put the scarabaeid larvae in good working order and incorporated some large lots of identified Scolytidae (weevils) in the regular reference collections. Of the adult Coleoptera W. S. Fisher rearranged the Bostrichidae of the world and accomplished a much-needed reorganization of the Anobiidae, Languriidae, Colydiidae and Melasidae. H. S. Barber rearranged several minor groups of Chrysomelidae and some portions of the Dermestidae, while L. L. Buchanan rearranged parts of many genera of Curculionidae. Dr. J. M. Valentine completely rearranged the West Indian Carabidae, as well as several larger genera of Elateridae. On the whole, the collections of Coleoptera are in fairly good condition. Many parts, however, are badly overcrowded and contain much poorly identified material which needs to be reviewed and redetermined. There are also very many schmitt boxes of pinned beetles, partly identified but mostly unnamed, remaining to be transferred to Museum trays.

Before his induction into the Army, W. D. Field completed the incorporation and rearrangement of the North American butterfly collections into one unit, a difficult and praiseworthy accomplishment. Work that Mr. Field had initiated on the Phalaenidae has now been taken up by H. M. Tietz, temporarily appointed for the purpose. Before his death August Busck completed the incorporation of the Engelhardt collection of Aegeriidae in the

national collection, which was rearranged at the same time to conform with Engelhardt's revision of the family. The adult and the slide collections of the Oecophoridae were arranged by Carl Heinrich to conform with Clarke's recently published revision of the group. Mr. Heinrich and Mr. Capps began a separate collection of inflated larvae by withdrawing such specimens from the adult collections. This work was completed for the large family Phalaenidae, considerably facilitating larval identifications in that group. Segregating the larvae has saved the adult collections from unnecessary handling. The principal additions to the Lepidoptera collections have been in identified larvae.

Austin H. Clark, curator of echinoderms, received during the year some hundreds of butterflies from New Guinea, the Solomon Islands, the West Indies, and northern South America, collected by officers and enlisted men in the Army and Navy. A considerable number have already been identified and placed in the collection. The specimens are turned over to the Museum as gifts from the collectors.

Moving the collections of Hemiptera to new quarters on the second floor provided needed room and more comfortable working space. Although this larger room seems to be rather well filled, space remains for considerable expansion. In spite of adding some of the identification work in the Homoptera to his already heavy workload, Dr. R. I. Sailer made appreciable improvements in the collection of Heteroptera, labeling and arranging it in as uniform a manner as possible considering the diverse character of the material. The subfamily Triatominae, of considerable medical importance, was given special attention, the entire collection being rearranged and all undetermined material identified. The same treatment was accorded the family Cimicidae and the genus *Solubea* of the family Pentatomidae following the completion of Dr. Sailer's revision of this genus. All doubtful Nearctic representatives of the family Miridae in the regular collections, some 500 specimens, were checked by Dr. Sailer and the identifications verified by Prof. H. H. Knight. The New World Tingidae were largely rearranged, as was also the greater part of the subfamily Corimelaeninae. The Old World Cydninae, previously mostly unidentified and in old cork-bottomed drawers, were checked and transferred to trays. The Nearctic collection of this group was arranged in large part; and more than 1,500 specimens of the genus *Euschistus* of the family Pentatomidae were reidentified and arranged. The entire Fracker collection of about 2,300 specimens, 700 specimens of the McAtee collection, and approximately 3,000 specimens from miscellaneous sources were incorporated in the regular collection. The large quantity of unincorporated material, especially of the McAtee, Baker, and Ball collections, constitutes the principal curatorial task remaining in the Heteroptera. The work that remains to be done in incorporating the leafhoppers and related groups, including the extensive and valuable Ball collection, is enormous. The aphid collection was so well reorganized last year that it has required little attention this year except for the incorporation of new material. The collection is well named and otherwise in very good condition, and almost certainly is the largest and best collection of aphids anywhere in the world. Further improvements have been made in the aleyrodid collections by Louise M. Russell, who remounted unsatisfactory old type material as opportunity offered. Approximately

100 lots of unmounted specimens were transferred from boxes and miscellaneous containers to the envelope collection of duplicate unmounted material, and about 250 slides were rearranged in accordance with recent revisionary studies. All currently received material of the Aleyrodidae, Psyllidae, and Chermidae has been incorporated. The improvement in the condition of these collections during the past three years since Miss Russell has had charge of them is most encouraging.

The transfer of the Diptera collections to the second floor was of great help in the better organization of these collections as a whole. During the past year the principal emphasis naturally was on the collections of blood-sucking flies, especially the mosquitoes. As a result of Army and Navy directives, 22 shipments of mosquitoes were received from the Army and 29 from the Navy during the year from foreign countries, including Algeria, Liberia, Gold Coast, Ascension Island, French Morocco, Brazil, Honduras, Nicaragua, Panama, China, New Hebrides, Solomon Islands, Samoa, Fiji, and New Guinea. In addition to the material received through the Army Medical Museum and the National Naval Medical Center, some Army and Navy officers have submitted collections involving many thousands of specimens directly to Dr. Alan Stone. As such enormous collections cannot be put into proper condition and incorporated promptly with the limited staff available, the Bureau of Entomology and Plant Quarantine appointed R. E. Nevin to assist Dr. Stone with the preparation and arrangement of this material. Early in the year the large collection of fruit flies comprising the Tephritidae, also contained in Dr. Stone's assignments, was incorporated in the regular series. Current material, as well as the collection of Conopidae identified and returned by Sydney Camras, was incorporated in the muscoid collections. The collections of Muscoidea are in reasonably good order as far as Nearctic material of certain families is concerned, but on some large groups, particularly the Muscidae and Anthomyiidae, a great deal of work still needs to be done. One of the most serious deficiencies is in the Old World material. For most families of Muscoidea the Old World fauna is so inadequately represented that identification work is extremely slow, much of it uncertain.

Apart from the incorporation of currently received material, little was done during the year in the rearrangement of parasitic Hymenoptera. R. A. Cushman, however, reorganized the North American material and part of the exotic collection in the course of his revision of Ophionini. Considerable old Philippine and Australian material in the Ichneumonidae was transferred from schmitt boxes to trays and roughly rearranged. As a result of Mr. Cushman's interest in the classification of larvae, some worth-while additions were made to the collection of immature stages of parasitic Hymenoptera. Of the aculeate Hymenoptera nothing was done with the bees, except that J. C. Crawford handled those requiring immediate attention. The wasps were given some attention by Dr. H. K. Townes, who studied and arranged seven drawers of Philanthini and four drawers of Oxybelini, and also incorporated in the collection part of the large lot of *Polistes* that was reviewed and identified by Lt. Richard Bohart.

The collection of Thysanoptera, though still relatively poor as far as the number of forms represented is concerned, is well organized. Only a small part of a considerable amount of material accumulated

from many sources, both United States and foreign, was mounted, owing to shortage of preparatorial assistance.

The collections of fleas and Anoplura were arranged in accordance with the latest classifications. The slide material of these two orders is in good condition, being very satisfactorily arranged, and nearly all specimens specifically identified. The mite collection, however, is in need of complete overhauling, but this is not possible until more slide storage is available. Some effort will have to be made soon to provide additional storage equipment.

Marine invertebrates.—The study series of marine invertebrates, both dry and alcoholic, is in excellent physical shape, and its arrangement and accessibility are being slowly but gradually improved. This year a considerable portion of our extensive collections of marine and fresh-water plankton was overhauled, relabeled where necessary, and arranged chronologically under collectors, chiefly vessels of the old U. S. Fish Commission and former U. S. Bureau of Fisheries: *Grampus*, *Fish Hawk*, and *Albatross*.

Mollusks.—The division reports material arrearages in the preparation of specimens for intercalation in the study series, due partly to the prolonged absence of Dr. J. P. E. Morrison on special detail and partly to the fact that the great volume of work of this sort is more than the present staff can cope with unaided. There is enough of this work awaiting attention to warrant the full-time employment of a preparator for several years.

Helminths, corals, echinoderms.—These collections continue in good shape. The helminths at present are being cared for at the research station at Beltsville, Md. The corals of the United States Exploring Expedition were removed from exhibition during the year and returned to storage. Considerable progress was made in the identification of unnamed echinoderms; 8,226 identified specimens were cataloged and incorporated in the study collection.

Plants.—During the year 14,650 specimens of flowering plants and ferns were mounted, wholly by adhesive straps. In addition, 4,711 specimens were repaired and 442 photographs and 5,663 typed or printed descriptions and reference labels mounted on herbarium sheets. Specimens stamped, recorded, and ready for the Herbarium total 14,539, leaving only about 1,000 still unstamped. An accumulation of more than 30,000 specimens is still awaiting mounting. For incorporation in the Herbarium there are on hand 60,000 mounted, stamped, and recorded specimens, including sheets bearing descriptions. This year the number of specimens incorporated in the Herbarium about equaled the newly mounted material. The identification of phanerogams from continental America by E. P. Killip and C. V. Morton continues to be successfully combined with the work of incorporating material in the Herbarium family by family, but both tasks were greatly retarded by lack of curatorial assistance. A considerable number of ferns were also distributed. Dr. E. H. Walker incorporated an accumulation of Old World specimens and a large number of reference sheets and mounted descriptions of Philippine and Old World types in the collection. The segregation of type specimens from the general herbarium was continued in the course of general distribution and rearrangement of the collection. The type herbarium now consists of 43,610 specimens, of which 776 specimens

segregated during the current year have not yet been placed in the storage outside of Washington.

As in previous years, E. C. Leonard cared for the cryptogamic collections, devoting about one day a week to them, giving special attention to mosses of the Washington region. The C. G. Lloyd mycological collections, in charge of John A. Stevenson, honorary curator, continue important as a reference series of the larger fungi of the world and of the wood-rotting forms in particular. There are over 1,500 type specimens, as well as many others authenticated by comparison with the original types at Kew, Paris, and other mycological centers.

Taxidermist shop.—Mention has been made of the overhaul and improvement of the European, Australasian, Asiatic, and African exhibition series of mammals under the supervision of W. L. Brown, chief taxidermist. This rather large undertaking involved cleaning 162 mounted mammals, repairing 33, painting 60, and placing 66 on branches. The hummingbird exhibit is under renovation through placing the birds on a panel covered with monk's-cloth, instead of perching them on wooden tees placed on glass shelves. The true color of the birds will be better revealed by the use of fluorescent lighting. Nine mounted heads, a snow leopard, 20 South American hawks, 1 snow goose, and 2 large sharks were placed on exhibition. Sixteen groups of reptiles and amphibians on exhibit were completed by the addition of as many specimens. Six of these specimens were painted by Dr. Doris M. Cochran. All mounted birds in the District collection and six for the Army Signal Corps were cleaned, as well as four cases of specimens in the Smithsonian index exhibit and 49 mounted heads. Specimens mounted, or of which the mounting was nearly completed, during the year comprised 6 mammals and 43 birds. Two hares and eight birds were mounted for a Navy survival exhibit. Eight mammals removed from former exhibits were dismounted for return to the study collections, two for remounting. Accessories were completed for five snake groups and a number of leaf molds and a quantity of leaves were made. Five snakes and one newt were reproduced in celluloid, as was the head of a Nicaraguan freshwater shark; considerable progress was made on the celluloid reproduction of the nearly 25-foot, 305-pound reticulated python received from the National Zoological Park. This was skinned after molding. The miniature work included four models, nine latex molds, and the placing of models of an African elephant and a hippopotamus on bases.

For the study collections 370 mammal skins were cleaned, made up, or degreased, and one large mammal was skinned. For the ornithological study series 102 birds were skinned and made up, and 46 others cleaned, degreased, or made up.

The osteologists had a busy year, cleaning 152 skeletons of mammals, 2,885 skulls, 45 sets of leg bones, 10 sets of seal and porpoise flippers, and 14 lots of miscellaneous bones; 8 skeletons were roughed out and 6 large skeletons, 2 skulls, and 3 leg bones degreased. The skeletal work on birds comprised 62 cleaned, 45 roughed out, 1 degreased, and 1 set of skull and leg bones cleaned. A jewfish skeleton and an electric-eel skull were also cleaned.

Instruction and training in making up skins for scientific purposes were given to four individuals, one a member of the Museum staff

in preparation for a field trip; a fifth person was given instruction in the molding of feet. Some assistance was also rendered the War Department in connection with insignia design.

INVESTIGATION AND RESEARCH

Mammals.—The curator, Dr. Remington Kellogg, spent part of September at the Museum of Comparative Zoölogy at the request of the director, Dr. Thomas Barbour, examining a collection of cetacean remains from Polk County, Fla. His report, "Fossil Cetaceans from the Florida Tertiary," was completed and submitted to Dr. Barbour in December for publication. During January Dr. Kellogg served as chairman of the American Delegation to the International Conference on the Regulation of Whaling held at London. Between sessions he studied at the British Museum (Natural History) in preparation of a report on the recent porpoises. At the request of the Division of Medicine of the National Research Council, he also undertook a series of descriptive accounts of the monkeys used by investigators of the Board for the Coordination of Malarial Studies. In collaboration with Maj. E. A. Goldman, of the Fish and Wildlife Service, the first of these accounts, a revision of the spider monkeys of the genus *Ateles*, has been completed. As in previous years, the curator participated in a number of interdepartmental conferences related to the International Agreements for the Regulation of Whaling. Gerrit S. Miller, Jr., research associate, continued work on the revision of his list of "North American Recent Mammals."

Birds.—The curator, Dr. Herbert Friedmann, completed part 10, the gallinaceous birds, of Ridgway's unfinished monograph, "The Birds of North and Middle America," and began the revision of his own previously completed manuscript on the falconiform birds. In this connection, he published three papers on as many genera of game birds, describing new forms. His study of the E. G. Holt Venezuelan-Brazilian collection was continued. He also published a paper on some West African honey-guides and wrote a number of reviews of recent ornithological literature. He is cooperating with Robert T. Moore, of the California Institution of Technology, and Ludlow Griscom, of the Museum of Comparative Zoölogy, on a checklist of the birds of Mexico. The curator gave some time to work on the fifth edition of the checklist of North American birds to be published by the American Ornithologists' Union. H. G. Deignan, associate curator, completed his monograph on "The Birds of Northern Thailand," now in press, and carried on his researches into the records and catalogs of the collections, uncovering unexpected types and correcting many errors, until he left on special service concerned with the war in January. Two of his papers on Thai ornithology, an obituary notice of an American bird student, Russell Richardson II, and a paper on Burma for the Institution's War Background Studies were published during the year. Despite his absence from the Museum on war work, S. Dillon Ripley, assistant curator, published two short papers, one on a Bornean cuckoo, *Rhinortha*, and one on a wild cross in ducks. Dr. Wetmore studied a number of lots of fossil bird bones and published seven papers on them, one of them a remarkable and unusually complete terrestrial vulture of a new family from Wyoming. Unlike most fossil birds, this one was complete enough to warrant

an attempted restoration of its appearance made by Walter A. Weber. Dr. Wetmore also published a number of short notes on North American birds and devoted a large part of his research time to the manuscript of the fifth edition of the A. O. U. Check List of North American Birds. His report on "A Collection of Birds from Northern Guanacaste, Costa Rica," published by the Museum, appeared only a few days after the close of the year. Dr. E. M. Hasbrouck, volunteer worker in the division, published a paper on the status of the European widgeon in North America.

Reptiles.—The associate curator, Dr. Doris M. Cochran, made further substantial progress in her studies on South American frogs. She also undertook to expand her popular handbook on "Poisonous Reptiles," No. 10 of the Smithsonian War Background Studies, into a treatise on "Dangerous Reptiles," nonpoisonous as well as poisonous, for the Appendix to the Smithsonian Annual Report. She also contributed a section on the preservation of reptiles and amphibians to the Institution's field collector's manual, and prepared copy for a mimeographed circular on the reptiles and amphibians of the South Pacific Islands.

Fishes.—The curator, Dr. L. P. Schultz, made notable progress with his studies on the extensive material that he collected in Venezuela, finishing a report on the Characinidae, in press at the close of the year, and completing manuscript for the families Gymnotidae, Cichlidae, Cyprinodontidae, Dasyatidae, Tetraodontidae, and Centropomidae. Dr. Schultz's report on "The Catfishes of Venezuela" was published in February in the Museum Proceedings. Dr. Robert R. Miller, associate curator, described two new species of fishes from the northwest coast of Mexico, and undertook a study of the Chinese fishes collected by Dr. D. C. Graham some years ago.

Insects.—The curator, Dr. E. A. Chapin, made further progress with the manuscript embodying the results of his investigations on the genus *Hippodamia* and continued work on other sections of the Coccinellidae.

In the Orthoptera and neuropteroid insects, Dr. H. K. Townes completed for publication a genotype catalogue of the Dermaptera, before undertaking other studies now in progress involving the classification of the group. One of these studies is a revision of the Nearctic species of Dermaptera, of which only 16 are known at present; another is a generic classification of the order. Dr. Townes has found good bases for the recognition of 4 families and discovered a number of new characters that materially facilitate generic grouping within the families.

In the Coleoptera, Dr. A. G. Böving continued work on the larvae of the family Anobiidae and also prepared preliminary keys for the generic identification of larvae of the Cerambycinae and Lamiinae, thus expediting their identification. Dr. W. H. Anderson continued work on curculionid larvae and completed the preliminary descriptions of the genera for which the larvae are known. His work on larvae has been much curtailed since taking over work on the adults of the Scolytidae following the death of Dr. M. W. Blackman. Special attention was given to various structures requiring slide preparation and 172 permanent slide mounts have been completed. New characters were discovered that materially assist the definition of hitherto difficult species. W. S. Fisher continued his study of the North American Anobiidae, placing emphasis upon the groups containing

North American forms of economic importance. Further, very satisfactory progress has been made on a revision of the North American Bostrichidae, a group containing many species causing serious damage to finished lumber, lead cables, and stored vegetable products.

In continuation of his detailed taxonomic studies on the white-fringed beetles, L. L. Buchanan completed statistical analyses of more than 1,200 specimens representing all the main populations of the *leucoloma* complex now occurring in the United States. Dr. J. M. Valentine's research was confined almost wholly to the Elateridae of the genus *Drasterius* and closely allied groups. Dr. Valentine himself prepared all the illustrations for this paper and, as most of the specific descriptions have been written, it should be completed before the end of next year. As a contribution to a volume of scientific papers which will be published in honor of Professor Petrunkevitch, of Yale University, Dr. Valentine completed a research study begun several years ago presenting certain aspects of speciation through an analysis of a restricted cave fauna of Carabidae.

Two parts of Dr. R. E. Blackwelder's "Checklist of the Coleopterous Insects of Mexico, Central America, the West Indies, and South America" were published during the year by the Museum (Bulletin 185).

Virtually no research could be conducted on the Lepidoptera because of reduced personnel and the marked increase of service activities. Some attention, however, was given to the classification of lepidopterous larvae begun by Carl Heinrich and H. W. Capps two years ago and to certain segregates of the Phycitidae, a revision of which has also been under way for several years. One of the division's artists devoted the greater part of her time to the preparation of more than 200 detailed drawings for this revision.

In the Heteroptera a revision of the pentatomid genus *Solubea* was published by Dr. R. I. Sailer, who also nearly completed a manuscript on the North American species of Cydnidae of the genus *Pangaeus*. Extensive revisions were also made in his manuscript on the cydnid subfamily Coreimelaeninae. While reorganizing the collection of Triatominae, an annotated card catalog was compiled. As this is undoubtedly the most complete index available anywhere, it is proposed to prepare it for publication at the first opportunity. Intermittent work has been done on the aphid genus *Macrosiphum*. As the group is enormous, containing many difficult sections, this undertaking cannot be completed short of four or five years at the present rate of progress. Research on the genus *Aleuroglandulus* of the Aleyrodidae begun last fiscal year was completed and published, and a critical study of certain very difficult sections of the genus *Aleuroplatus* was submitted for publication.

In the Diptera, because of the war, all Dr. Alan Stone's time was given to service work on mosquitoes. Acting on a suggestion coming from Navy sources, Dr. M. T. James devoted himself to the preparation of a manual for the identification of Diptera involved in human myiasis. Most of the required new illustrations were completed by one of the Bureau's artists, and about half of the manuscript written. A little time was given to the study of the anthomyiid genus *Cordilura*. C. T. Greene gave special consideration to certain species of the groups of *Agromyza* frequently received for determination, and in which definite identification have hitherto been impossible. A study

of both larvae and adults revealed that certain segregates in those complexes can be set off rather sharply and definite names assigned, a matter of considerable importance in connection with the identification of the abundant material received from the Division of Foreign Plant Quarantines.

In the Hymenoptera research work on the Ichneumonidae was confined largely to an attempt to complete the generic revision of the tribe Ophionini. In this connection, the species of the included genus *Enicospilus*, as represented in Hawaii, were revised and the resulting paper submitted for publication. Some work was accomplished and published on the ichneumonid genus *Exentrus*. For several years past A. B. Gahan has given most of the time available for revisionary work to developing a sound family classification of the Chalcidoidea, making encouraging progress with the problem during the current year.

Working on Thysanoptera, J. C. Crawford has made further progress in checking and correcting the large manuscript originally prepared by Dudley Moulton on the North American *Frankliniella* while temporarily employed by the Division of Insect Identification. Mr. Crawford also prepared and published a paper describing a new genus and species having significance as a virus vector in South America. He also continued his study of the species *Sericothrips* occurring in the eastern part of the United States.

The time that Dr. H. E. Ewing was able to devote to research work on ectoparasites was given over to a study of the trombiculid mites (chiggers).

The morphologic study on "The Feeding Apparatus of Biting and Disease-carrying Flies," by R. E. Snodgrass, published by the Smithsonian Institution in 1943, aroused such interest that not only was the first edition soon exhausted, but a demand was created for a consideration of the subject on a broader basis. Mr. Snodgrass therefore undertook and completed a larger paper entitled "The Feeding Apparatus of Biting and Sucking Insects Affecting Man and Other Animals." This extension of the earlier paper covers, besides the Diptera, the Mallophaga, Anoplura, Siphonaptera, and Hemiptera, with an enlarged introductory section on the feeding mechanism of the cockroach and notes on the relation of the various species to disease. During the year Miss M. M. Carpenter completed a bibliography of biographies of entomologists based on a paper of the same title published many years ago by J. S. Wade, Bureau of Entomology and Plant Quarantine. She also continued to accumulate material for an entomological bibliography of the West Indies.

Marine invertebrates.—The curator, Dr. Waldo L. Schmitt, completed more or less urgently needed identifications of decapods and gave some attention to a revision of the American lithodid crabs. Clarence R. Shoemaker, associate in zoology, since his retirement as associate curator on March 31, 1944, has given virtually his entire attention to the revision of the amphipod fauna of the east coast of North America. A study of the genus *Unicola* is nearing completion.

In connection with his studies on the bryozoan collections, Dr. R. S. Bassler reports that, although the collection of recent Bryozoa has necessarily not received as much attention as usual during the past year, he nevertheless has been able to prepare and identify three

collections of Arctic material and a fair number of miscellaneous specimens from other parts of the world.

This year Dr. J. A. Cushman, collaborator in Foraminifera, gave special attention to well and surface samples from the Atlantic and Gulf Coastal Plain regions, and completed monographic studies of several foraminiferal genera, in part published and in part in press, as well as certain faunal studies of recent shallow-water Foraminifera of New England, and various Eocene and Cretaceous foraminiferal faunas from type localities.

Mollusks.—The curator of mollusks, Dr. Paul Bartsch, in collaboration with Dr. Carlos de la Torre, worked on their monograph on the Cuban urocoptid land mollusks, and about two-thirds completed his monographic study of the East Pacific recent and fossil mollusks of the family Turridae. The curator and the associate curator, Dr. H. A. Rehder, continued work on their joint project on the Hawaiian gastropod mollusks, while Dr. Rehder also did considerable research on the West Atlantic marine mollusks as called for by inquiries from various sources. These studies furnished material for six published papers, two jointly with the curator. Two papers based on studies completed by the assistant curator, Dr. J. P. E. Morrison, were also published during the year.

Echinoderms.—The curator, Austin H. Clark, completed Part 4 of Bulletin 82, "A Monograph of the Existing Crinoids," except for assembling the plates. The account of the large family Thalassometridae is in final form, and that of the smaller family Charitometridae was nearly finished. The identification of the echinoderms collected by the U. S. Fish and Wildlife Service trawler *Pelican* was almost completed, except for the Holothuroidea, and work begun on the Ophiuroidea of the *Albatross* Hawaiian Expedition of 1902. A paper on a new fossil comatulid from the Cretaceous of Cundinamarca, Colombia, was prepared and submitted for publication.

Plants.—Research by members of the staff centered largely on activities directly associated with the war, and on extensive South American collections. In working over this South American material, which includes large recent collections, as well as a considerable accumulation of specimens received for identification in the past, the associate curator, E. P. Killip, assembled much valuable data for the proposed "Flora of Colombia," while making progress on other monographic studies, notably the Papilionaceae of Colombia and the amaryllidaceous genus *Bomarea*. Critical studies of special groups from the northern Andean region were carried on by the curator, Dr. W. R. Maxon, who published descriptions of several new ferns; by the assistant curator, C. V. Morton, who published an account of the Solanaceae and prepared revisions of the genera *Monopyle* and *Smithiantha* of the family Gesneriaceae and descriptions of various new species of Malpighiaceae; and E. C. Leonard, assistant curator, who has in preparation a synopsis of the family Acanthaceae as represented in Colombia. In addition, Mr. Leonard described three new species of Acanthaceae from Panama and completed a paper on the Acanthaceae of the Sonoran Desert, while Mr. Morton submitted for publication a critical review of the Mexican phanerogams described by the late Marcus E. Jones and continued the preparation of his synoptical catalog of Cuban plants. Dr. E. H. Walker, assistant curator, prepared a revision of the genera *Distylium* and *Sycopsis*

(Hamamelidacea). Mrs. Agnes Chase, custodian of grasses, continued studies of South American grasses, as well as those of Papua and Australia. Dr. F. A. McClure, research associate in botany, is engaged in a study of American bamboos, largely on the basis of material assembled through recent field work.

Diatoms.—The associate curator, Paul S. Conger, continued study of the diatoms of the Presidential Cruise of 1938 and of those of the Atlantic coast. He prepared for publication the description of a new method for making micrometric rulings on glass. Additional information on a general account of diatoms was assembled, and experiments on new methods and materials of microtechnique pertaining to diatom preparation continued.

The number of lots of specimens sent in with requests for identification were as follows: Mammals, 43; birds, 32; reptiles and amphibians, 13; fishes, 32; insects, 107; marine invertebrates, 51; mollusks, 62; corals, 1; plants, 254; diatoms, 5; a total of 600, calling for the identification of approximately 18,388 specimens. The number of requests for information made in person, by letter, or by telephone, other than identifications, always greatly exceeds the requests for identifications alone. The division of insect identification of the Bureau of Entomology and Plant Quarantine received 33,396 lots of insects for determination, from which 57,466 specimens were identified. Of this total 1,494 specimens, representing 835 lots, were determined in the division of insects.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions, government agencies, and private individuals aggregated 82 transactions, 3,998 specimens; 1,834 specimens were sent out in exchange, 1,756 as gifts and 408 as transfers to military and naval centers. The 8,656 plants distributed were sent out as exchanges to 58 institutions and correspondents. In addition, 4 photographs, 1 drawing, and 1 painting were sent out in exchange; and 86 photographs and 6 drawings were distributed as transfers.

NUMBER OF SPECIMENS UNDER THE DEPARTMENT

The summary of specimens given below is based on the numbers estimated for the previous fiscal year, with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time. No estimate has as yet been made for the corals, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions lots consisting of minute organisms are frequently counted as single specimens, though they may contain hundreds and even thousands of individuals, the enumeration of which could serve no useful purpose.

As the result of a typographical error, the number of helminths in the collection was given in the annual report for 1933 as 144,255 when it should have been 41,255. Therefore the count has been revised. It now corresponds to the actual number of helminthological catalog entries, 34,828. Although any one of these entries may embrace from one to several thousand specimens, each has been considered as

representing a single lot and is counted as one specimen as in the case of minute organisms referred to immediately above.

Mammals		246,302
Birds:		
Skins	289,078	
Alcoholics	10,076	
Skeletons	18,128	
Eggs	90,424	
		407,706
Reptiles and amphibians		128,145
Fishes		1,300,639
Insects		5,547,707
Marine invertebrates		1,047,152
Mollusks		3,071,747
Helminths		34,828
Echinoderms		177,246
Plants		1,863,000
Diatoms		45,000
Total		13,869,472

DEPARTMENT OF GEOLOGY

(R. S. BASSLER, *Head Curator*)

THE past year was saddened by the death of two esteemed members of the geological staff, Dr. Charles E. Resser, curator of invertebrate paleontology and paleobotany, and Dr. E. O. Ulrich, associate in paleontology. Dr. Resser, who will long be remembered for his studies in Cambrian paleontology, died on September 18, 1943, after an illness of less than a month, in the prime of life and scientific productivity. Doctor Ulrich, world authority on American Paleozoic stratigraphy and paleontology, was busy with research work at the Museum until his eighty-seventh birthday, when his health failed, and several weeks later, on February 22, 1944, he passed away.

Curator William F. Foshag was still occupied in Mexico with his supervisory work in surveys for strategic minerals, and Associate Curator C. Lewis Gazin continued on military detail in the United States Army.

Despite these personnel losses the curatorial work was carried on, and the war activities and good-will program of the Smithsonian Institution were continued as heretofore. Dr. G. A. Cooper completed his survey of Illinois Devonian oil strata and continued field and laboratory studies of the geology of northwestern Sonora, the latter in collaboration with the Instituto Geológico de México. A month and a half of field work in Sonora, in association with his Mexican colleague, Ing. A. R. V. Arellano, resulted in good paleontological collections and considerable increase in knowledge of the structure and stratigraphy of the area.

Field work in vertebrate paleontology, usually our best source of striking exhibition material, was necessarily restricted this year. In a short trip to the nearby Calvert Cliffs on Chesapeake Bay, Curator C. W. Gilmore and his assistants had the good fortune to excavate a sirenian skeleton of Miocene age, a fossil sea-cow over 10 feet long. In the laboratory the work accomplished on the study and exhibition series of fossil vertebrates compares favorably with other years. The actual number of specimens received in all divisions of the department, as anticipated, was the smallest for several years.

Information supplied by the staff and the use of the collections in furnishing necessary data to research workers and representatives of the war agencies reached a new high mark. Finally, the many visiting servicemen, representing a clear-cut cross section of American life, have been so frank in their questions and remarks on the exhibits that much of value for future work has been learned. Their comments have been of particular value in revealing the most appealing type of exhibition label, namely, a placard explaining in several lines of rather large black type the essential features of each display case.

Associate Curator G. Arthur Cooper was promoted to the curatorship of the division of invertebrate paleontology and paleobotany on

October 2, 1943, and Dr. John B. Reeside, Jr., of the Geological Survey, was appointed custodian of the Mesozoic collections on June 19, 1944.

ACCESSIONS FOR THE YEAR

Approximately 3,466 specimens listed under 123 accessions were receiving by the department during the year, in contrast with 133 accessions and 9,725 specimens for 1942–43. Listed by divisions, these are distributed as follows: Mineralogy and petrology, 74 accessions (373 specimens); invertebrate paleontology and paleobotany, 41 accessions (3,076 specimens); vertebrate paleontology, 8 accessions (17 specimens).

Mineralogy and petrology.—Income from the Roebling fund, providing for the purchase of important gems and minerals, was used this year to procure 31 gem stones of rare quality and high exhibition value. Of these the following deserve special mention: Nine zircons from Indo-China, ranging in weight from 9.4 to 118.05 carats, and white, blue, brown, yellow, and green in color; a Madagascar pink morganite of 56 carats; 6 spinels from Ceylon, 3.2 to 22.05 carats in weight, and purple, red, pink, orange, and blue in color; a 4-rayed star garnet from Emerald Lake, Idaho; 4 tourmalines of yellow, red, and pink colors, from Brazil, averaging 35 carats; a black star spinel from Ceylon, 6.61 carats; and a cat's-eye emerald of 4.56 carats from Colombia. Included also were a blue fire Mexican opal of 55.98 carats and a Brazilian green beryl of 113.9 carats.

Two other gems of particular interest are an aquamarine of 15.3 carats from Idaho, donated by Arthur Montgomery, and a beautiful pink Brazilian topaz of 34.1 carats, secured through the Frances Lea Chamberlain fund.

Two mineral accessions were credited to the Roebling fund, namely, four unusually formed quartz crystals from Dona Ana County, N. Mex., and eight transparent colorless scheelites from Kernville, Calif.

Minerals secured through the Canfield endowment fund embraced two specimens—a libethenite (basic copper phosphate) from Yerington, Nev., and a covellite (copper sulphide) from Butte, Mont.

In spite of the relatively few minerals obtained during the past year as compared with normal times, a fair number is recorded as a result of the associate curator's efforts to interest persons to collect for us. Once the importance of the Museum's collection is realized, such persons are likely to continue an interest in its growth. Important minerals added to the collection are given below.

From Minas Gerais, Brazil, there came a fine crystal of muscovite mica from Espera Feliz, donated by Fioravanti Padula, and a pseudomorph after either columbite or polycrase from Municipio of Juiz de Fora, gift of José Ferraz Simoes; attractive specimens of pitchblende, malachite after heterogenite and some cassiterite from the Belgian Congo, as well as a good example of microlite from New Mexico, were presented by Dean F. Frasche. A number of specimens representing weinschenkite (yttrium phosphate) from Kelly Bank, Vesuvius, Va., were transferred by the Geological Survey. This is the first occurrence of this rare mineral in our country. The zeolite series was increased by the gift of W. Harold Tomlinson of natrolite, chabazite, and related minerals, from the locality of Perkiomenville, Pa. An interesting exhibition specimen, a limonite group pseudomorph after

siderite from Roxbury Station, Conn., was presented by Mr. and Mrs. Edward J. Marcin. Garn A. Rynearson presented a well-crystallized specimen of uvarovite (chromium garnet) from Blue Point claim, Tuolumne County, Calif. A specimen of lithiophilite (lithium manganese iron phosphate) from the Black Hills of South Dakota was received from Prof. D. Jerome Fisher. Floyd A. Rapp continued his interest by collecting and presenting a specimen of wocheinite, a variety of bauxite, from Paranam, Dutch Guiana. A large sample of kämmererite (chromium bearing chlorite mica) from Klamath Mountain, Oreg., was received from Richard H. Jahns. Another large specimen, one of manganotantalite, was obtained through James S. Baker, chief, Minor and Rare Metals Section of the Foreign Economic Administration. The same organization, through Mr. Baker, transferred specimens of columbite and tantalite and an unusual example of pitchblende with its alteration products, all from Brazil. Mr. Baker personally presented the Museum with a specimen of native silver and chalcocite from the Cole mine at Bisbee, Ariz., which he had collected there some years ago.

Frank L. Hess showed his usual interest in the collections by donating a specimen of dendritic uraninite (uranium ore) from the Gordonia District, South Africa. Walter C. Warren presented a specimen of boehmite clay from King County, Wash. Maurice Slavin, on a return visit from Brazil, brought the Museum three tantalite crystals and a specimen of simpsonite (tantalate of lime and alumina) from Solidada, Brazil. A gift from Richard Lemke comprised a tourmaline and an aquamarine, both from Amelia, Va. A fine crystal of scheelite from Nivloc, Nev., came as a gift of William J. Moore (deceased). Miss Jewel J. Glass, of the Geological Survey, secured for the collections a number of pink triplite specimens (manganese iron phosphate) from Tungstonia, Nev. Through the courtesy of Arnold Hoffman, calcite crystals were obtained from two producing localities, Clyde Park, Mont., and Palm Wash mining district, Truckhaven, Calif. Mrs. Mary Fox supplied seven specimens of muscovite mica from the quarries near Custer, S. Dak. A manganocolumbite sample from Greenbushes, Southwest Australia, was presented by F. G. Forman, Geological Survey of Western Australia.

Seven new meteorites have been added to our collection, six of which are undescribed falls. An 82-gram slice of the Lowicz, Poland, meteorite was obtained through exchange with the American Museum of Natural History. One complete individual stone, weighing 12 pounds, 7 ounces, of the Cavour, S. Dak., discovery was added to the Roebling collection. A slice, weighing 142 grams, of a new stony meteorite from San José, Tamaulipas, Mexico, first recognized by the U. S. National Museum, came to us as a gift from the Texas Memorial Museum at Austin. A specimen of the María Elena, Chile, fall, weighing 15.5 kilograms, was recorded from Señor Coope and Fernándo Araya Valdés. Dr. Stuart H. Perry continued his annual gifts to our collection with the presentation of the following meteorites:

New Westville	Preble County, Ohio	Iron	4.8 kg.
Edmonton	Metcalfe County, Ky	Iron	10.2 kg.
Penokee	Graham County, Kans	Stone	3.58 kg.
Cavour	Beadle County, S. Dak.	Stone	4.31 kg.
Linwood	Nebraska	Stone	46.0 kg.

In addition to these specimens Dr. Perry presented a duplicate set of the 5-volume album containing 1,500 photomicrographs of meteorite structures.

The largest addition to the ore collection, a transfer from the Metals Reserve Co., consisted of a series of manganese and chromium ores from foreign deposits all over the world. Specimens were selected from the Baltimore, Md., stockpile, representing localities in South Africa, India, Egypt, Turkey, Philippines, Brazil, and Cuba. The Geological Survey transferred tungsten specimens from Idaho, California, and North Carolina deposits. The Southern Railway System donated a collection of copper, chromium, manganese, and miscellaneous ores from the southeastern United States from deposits along their rail lines. The Republic Mining & Manufacturing Co. through Lawrence Litchfield, Jr., presented eight specimens of French bauxite, and C. I. Dismant donated a gold ore sample from the Itogon mine, Benguet Province, Philippines.

Additional interesting ores donated to this series are as follows: Specimens of sylvite and blue halite from the U. S. Potash Co. mine near Carlsbad, N. Mex., from C. M. Boos; bauxite from the "lignite" stockpile near Bauxite, Ark., gift of J. P. Labaw; and specimens of Arkansas cinnabar from William A. Riggs. Specimens of bauxite and miscellaneous minerals from Dutch Guiana and other localities were obtained in an exchange with F. W. Horton.

Three large porphyritic granite specimens sent to the Museum from Lemhi County, Idaho, by J. A. Herdlick, will be very useful in the petrographic exhibits. The Arkansas Geological Survey, through H. E. Wheeler, presented a specimen of novaculite from Hot Springs, Ark. One lot of unusual concretions was obtained from near Lévis, Canada, through the kindness of Frank L. Hess. Five specimens of septarian concretions in marcasite from the Devonian rocks near Amherst, Ohio, formed a gift from Claude C. Hamel.

Invertebrate paleontology and paleobotany.—The slight decrease in accessions and the smaller number of specimens received this year are not accompanied by a similar decrease in value, because important material for scientific study was secured, partly as a result of careful selection of specimens.

The most important new material is comprised in approximately 500 specimens of rare Paleozoic fossils collected for the Museum by Curator Cooper during his field work in northwestern Sonora, Mexico. This region has never been thoroughly studied, and consequently even the comparatively small collections of good Permian and Cambrian fossils obtained represent important additions to knowledge. Besides the Mexican fossils, Dr. Cooper secured about 500 specimens of Middle Ordovician invertebrate fossils in southwestern Virginia and eastern Tennessee while studying the stratigraphy of these areas. These fossils included some unusual new crinoids and cystids, as well as a good selection of bryozoans and brachiopods.

Other worthy additions to the Paleozoic biologic series are contained in the following gifts: Middle Cambrian fossils from the Cloud Rapids formation of Newfoundland from the Department of Geology, Princeton University, through Prof. B. F. Howell; Cambrian and Early Ordovician brachiopods from Lévis, Quebec, from Dr. Franco Rasetti, Laval University; Cambrian brachiopods from Oklahoma collected by Dr. Charles E. Decker, University of Oklahoma; in-

vertebrate fossils of high Ordovician age from Frobisher Bay, Southwest Baffin Land, from Capt. Robert A. Bartlett; invertebrate fossils from the Detroit River Devonian formation of north-central Ohio, collected by Dr. Erwin C. Stumm, Oberlin College. Portions of seven cores representing the Devonian parts of deep wells in Illinois were received from the Gulf Refining Co. These cores contained numerous fossils which will help to determine the underground geology of the area. Charles Southworth presented fine biological material to the collection in the form of 500 specimens of Middle Devonian brachiopods, making up the choice examples of a season's collecting.

Carboniferous brachiopods and crinoidal remains from northeastern Washington, useful in deciphering the age relations of the associated rocks, were presented by John P. Thomson. A transfer from the Geological Survey of Devonian invertebrate fossils from the Dyer formation of northwest Colorado contains material essential in determining the geology of this area.

Plaster casts of type fossils today have great scientific value, in view of the destruction taking place in foreign museums. Such a cast, an important English Carboniferous crinoid, *Poteriocrinites crassus* Miller, the holotype and only specimen of which was in the ill-fated Bristol Museum, England, was a welcome gift of the British Museum (Natural History) early in the year. Another valuable addition was a set of type casts of several crustaceans and a new comatulid crinoid from the Cretaceous rocks of Colombia, through the good offices of Prof. José Royo y Gómez, of Bogotá.

Nine accessions should be especially mentioned as they contain type specimens: Cotypes of the foraminifer *Pseudophragmina (Athecocyclina) macglameriae* Vaughan came as a gift of the Alabama Geological Survey, through Dr. T. Wayland Vaughan; fragments of the holotype of the Devonian bryozoan *Trachytoechus moniliformis* Fritz was presented by the Royal Ontario Museum of Paleontology, through Dr. Madeleine A. Fritz; paratypes of the Pleistocene mollusk *Vitrinella shimeri* Clapp, from subway excavations in Boston, Mass., were received from the Museum of Comparative Zoology, through W. J. Clench; 37 types and figured specimens of Mesozoic and Cenozoic echinoids figured in Clark and Twitchell's "Mesozoic and Cenozoic Echinodermata of the United States," U. S. Geological Survey Monograph 54, deposited by Johns Hopkins University, through Dr. C. T. Berry; slides of thin sections of larger Foraminifera from the Eocene rocks of Venezuela, a gift from Dr. H. G. Kugler, through Dr. T. Wayland Vaughan, including cotypes, typotypes, and plesiotypes of described species; Lower Cretaceous cephalopods from Texas, 22 specimens including 2 primary types to be figured by Miller and Harris; a gift from Dr. A. R. Loeblich, Tulane University, through Dr. A. K. Miller, University of Iowa, paratypes of 11 species of marine mollusks from the Miocene of California, described by Dr. Myra Keen and obtained in an exchange with Stanford University; the holotype of the Cretaceous coral *Microsolena williamsonensis* Wells, gift from Dr. J. W. Wells, Ohio State University; 76 recent and Cenozoic corals from Venezuela collected by Dr. H. Hedburg, including 14 holotypes, 12 paratypes, and 27 figured specimens also described by Dr. J. W. Wells and presented by him.

Outstanding gifts to the Cenozoic study series were 47 specimens of mollusks, 2 crabs, 1 echinoderm, and 6 lots of fishes from Dr. S. F.

Blake, representing material from the Pleistocene at Wailes Bluff, Md.; 760 specimens of Tertiary fossils from the Galápagos Islands, from Dr. Saul Schwartzbach, especially interesting in working out the geological history of this classical area in the study of evolution. A gift and an exchange of Miocene fossils from Hugh H. Iltis added several hundred desirable mollusks, Bryozoa, and Ostracoda to the collections.

Vertebrate paleontology.—The impossibility at the present time of carrying on any field work other than trips to nearby localities has necessarily reduced the number of accessions in this division.

The Calvert Cliffs near Plumpoint, Md., celebrated for their Miocene outcrops, yielded the most important accession of the year—partial skeleton of a sirenian, or sea-cow, excavated by members of the staff and William Salter. This specimen is unique in being not only the most complete skeleton but also the first from this area to retain a well-preserved skull. Its detailed study will doubtless make it possible to establish the identity and relationships of many fragmentary sirenian specimens now in the collection.

From nearby Scientists Cliffs on Chesapeake Bay came gifts of the teeth of the fish *Dictyodus* from Mrs. S. Karrer and of a metacarpal of a fossil seal from Dr. S. F. Blake.

A composite skeleton of the extinct antelope *Stockoceras onusrosagris* (Roosevelt and Burden), from the Papago Springs Cave in Arizona, and the cast of a complete skull of the curious 3-horned antelope *Synthetoceras tricornatus* Stirton, from Texas, were received as gifts from Childs Frick. Both specimens represented genera new to the collection.

Casts of the type specimen of the flying reptile *Dermodactylus montanus* Marsh and of a skeleton of the rare Triassic armored reptile *Hypsognathus fenneri* Gilmore were received in exchange with the American Museum of Natural History.

The ichnite collection was enriched by nine slabs containing the trails of *Paramphibius didactylus*, once considered a vertebrate animal but now regarded as a horseshoe crab. These slabs came from the Chemung shales of Pennsylvania, received in exchange with Charles F. Smith.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Exhibition work has progressed in all divisions of the department but along lines requiring no structural material or building alterations and on a smaller scale because of the diminished staff. Cleaning of the exhibits, their better arrangement, and the preparation of more readable labels constituted the major tasks of the year.

The arrangement of the geological exhibit in such a way as to bring out the orderly development of life and of the earth's mineral products has been commented upon favorably by our visiting servicemen. As the visitor enters the east hall from the rotunda, John Elliott's striking mural "Diana of the Tides," illustrating the various phases of geology as revealed in a modern setting, first attracts his attention. The seashore in the painting is then brought to life on the exhibition floor, where an actual fossil sea beach of far distant Cambrian time, with ripple marks and animal tracks, is displayed. From this, one can pass in review all the stages of life evolution upon the earth, from the simplest plants up through the ferns, cycads, and

conifers and the one-celled animals, through the shells, Crustacea, fish, and reptiles to the most developed flowering plants and the highest mammals—a real "Parade of Life." The hall of physical geology is next in order, with its exhibits of modern phenomena ranging from caves to volcanoes and coral islands to mountain building and concludes the department's display on this floor. The study of man follows logically, and so the next hall is devoted to the African tribes exhibit of the department of anthropology. Should the visitor enter geology from this hall, he simply reviews the earth's story in reverse order. Similarly, on the second floor just above, the inorganic side of geology is presented. The minerals and gems of most elementary composition are located nearest the entrance and one passes in regular order through the interesting oxides, sulphides and carbonates to the most complicated ores and rocks. Here again the department of anthropology follows with the most logical exhibit, one of primitive man and of the part played by ores and minerals in his evolution.

In mineralogy and petrology the revision of the gem exhibit by relining the remaining cases and relabeling the entire collection was completed. The former method of displaying one or more gems on white velvet pads proved to be too monotonously symmetrical, and so a more random style was adopted to show related stones grouped to indicate their color possibilities and geographic association. The less important specimens were removed and incorporated in the gem study collection. The installation of three new gem cases, one containing various strands of beads, another to illustrate jade and jade substitutes, and the third for amethysts and related quartz minerals, was a part of Mr. Benn's work in this division.

A special diamond case was prepared shortly after the receipt of the "Punch" Jones diamond as a loan for public display. This 34.46 carat stone, the largest alluvial diamond in America, was found at Peterstown, W. Va. The owners and codiscoverers of the stone, William P. and Grover C. Jones, have lent it to the Museum for an indefinite period. Another diamond exhibit consisting of crystals and models of famous large stones was installed in a case containing a geologic series illustrating the rocks occurring at the African Kimberley diamond mines and the Pike County, Ark., deposits.

The preparation and installation of ground-glass partitions in the large upright mineral exhibition cases by Messrs. Benn and Reberholt were also completed. This change marks a decided improvement, as the partitions hide the backs of specimens on opposite sides of the case and also aid in emphasizing the mineral colors. The most noteworthy task completed during the year was the consolidation of the three mineral study collections into one continuous series, a major undertaking which has been under way for several years. In the hall of physical geology there was installed a long upright case illustrating vein and dyke structures, and also an exhibit illustrating the classification of all types of rocks to replace the igneous rock exhibit which was dismantled last year. When public interest in the volcano Parícutin was at its height a temporary exhibit was placed in the foyer to demonstrate its history and lava products through photographs and specimens supplied by Dr. Foshag.

A card catalog of all the mineral names represented in the collections has been finished, and an index of all valid described minerals as well as discredited ones is well under way.

B. O. Reberholt, in charge of the grinding and polishing laboratory, reports the following work accomplished during the year: Preparation of 325 thin sections of rocks and fossils, polishing and etching of 27 meteorites, and cutting and polishing of 330 mineral, rock, and ore specimens. Some large specimens were cut and polished for war agencies; in some cases this was entirely a matter of service, but usually the Museum obtained a generous portion of the materials cut.

The loss of Dr. Resser early in the fiscal year necessitated a revision of the plans for invertebrate paleontology. Likewise, there was a delay in the completion of the long wall exhibition case for paleobotany requiring postponement of finishing this exhibit as planned. Dr. Cooper rearranged several sections of the biologic series in more logical position; for example, the trilobites and all other arthropods now are in consecutive order completely filling two rooms. Similarly, several portions of the stratigraphic series have been consolidated into a single continuous one.

Identification of the study collections, by members of both the Museum and the Geological Survey staff proceeded as usual. The work of processing all the small accessions was kept up-to-date, but comparatively little could be accomplished in reducing the backlog of unprepared material. The head curator made a slight impression along the latter line in preparing and identifying several Paleozoic faunas with which he was familiar, namely, the Holland Patent slates of New York, the Hermitage and Lebanon limestones of central Tennessee, and the Upper Richmond beds of Ohio. He has continued work on the collections of microscopic fossils and also prepared and identified three recent faunas of Bryozoa from the Arctic for the department of biology.

As a part of the care of the collections, the progress made in building up the department library deserves special mention. Through the gifts of the Walcott, Teller, Ulrich, Resser, and other libraries, many books and thousands of pamphlets covering all phases of geology and paleontology have been accumulated. These were too heterogeneous and bulky to handle as a single library. Accordingly, Miss Helena M. Weiss undertook the classification and arrangement of the material as time would permit. Starting with the Merrill library as a basis, she has built up a section of general geology with over 12,000 pamphlets alone. Paleontology was separated into four separate collections distributed in their appropriate sections of the Museum, Paleozoic invertebrates being represented by more than 16,000 pamphlets, Mesozoic and Cenozoic invertebrates and paleobotany by a smaller number. These have all been marked with the Museum stamp, and the cataloging of the books is proceeding slowly. Miss Weiss also has charge of the loan of books from the library.

Dr. Cooper spent much time in preparing his collections from northwestern Sonora. These fossils are preserved mostly in limestone. All the Cambrian fossils had to be prepared by excavating them with needles or other small tools. The Mississippian and Permian fossils, on the other hand, were prepared by means of acid and tools. The limestone containing the Permian fossils is very impure, and conse-

quently most of the shells had to be excavated from a siliceous residue after decalcification of the matrix.

Early in the fiscal year the 60-gallon stone vat prepared for the etching of fossils was delivered and mounted. Since then it has been in continuous use in dissolving the west Texas Permian limestone blocks, thereby freeing the silicified fossils they contain. The results have been most gratifying, a single large block weighing up to 20 or 30 pounds often yielding two to three standard drawers full of free and clean shells in a perfection of preservation that could be attained in no other way.

Curator C. W. Gilmore reports for the division of vertebrate paleontology that during the past year a unique specimen was added to the exhibition series in the form of a large rock slab from the Eocene of Wyoming showing the shells of 15 swamp turtles *in situ*. These turtles (*Echmatemys*) are worked out in relief, care having been exercised to preserve them in their original relationships. At one corner of the block a section of the bank with two specimens partly excavated, assists the visitor in visualizing how all were originally buried in the rock.

A complete skull of the large Upper Cretaceous fish *Portheus molossus* Cope and one of *Icthyodectes anaides* Cope, both from Kansas, were prepared and placed on exhibition to replace specimens of less display value.

In addition to supervising the work in the laboratory and preparing the exhibits mentioned above, Norman H. Boss, chief preparator, prepared various other vertebrate fossils, one of the more important being the skull and part of the skeleton of the flying reptile *Pteranodon occidentalis* Marsh, from the Niobrara chalk of Kansas. Thomas J. Horne was almost continuously occupied with the preparation of specimens of the 1942 Oligocene collection from Wyoming, work that had been practically completed by the close of the fiscal year.

Mention should also be made of the renovation of all the cases and large exposed skeletons in the main exhibition hall. Nearly four weeks were spent by the preparators in completing this work and making necessary repairs, but the much improved appearance of the hall compensates for the time required.

INVESTIGATION AND RESEARCH

Dr. W. F. Foshag was occupied with his investigations on the mineral resources of Mexico for the Geological Survey during the entire year. His work is largely being incorporated in a report for that agency. In addition, he has spent some time at the Parícutin volcano making observations and collecting material for the Museum exhibition series.

E. P. Henderson completed some analyses of new meteorites, partly prepared the manuscripts, maintained the general index of new meteorites, and spent considerable time indexing and proofreading a monograph by Dr. Stuart H. Perry, which now forms Bulletin 184 of the U. S. National Museum. Various determinations were made on the sublimates of the Parícutin volcano, and a series of analyses now under way should be completed within the coming year.

Before his untimely death Dr. Charles E. Resser was engaged in the study of the Lower Ordovician trilobites of Vermont and adjacent areas and was continuing his Cambrian Summary and Bibliography.

Many years of work by Drs. Walcott and Resser have gone into this Summary and Bibliography, both of which when finished will be valuable contributions to science.

The researches of the head curator have been limited to three projects: first, his monographic study of Lower Paleozoic corals, second, a paper on the giant Paleozoic Ostracoda known as the Leperditiidae; and third, a continuation of researches on American Ordovician crinoids and cystids contained in the Springer collection. The manuscript and illustrations of all three have been more than half completed.

Dr. G. A. Cooper completed his study of the Devonian of Illinois in collaboration with Dr. A. S. Warthin. This project resulted in the preparation of two manuscripts, one dealing with the subsurface stratigraphy of the Devonian, the other being a more detailed and extensive piece of work. The preparation of the Paleozoic fossils from Sonora, Mexico, in connection with a manuscript describing the geology and paleontology of the Caborca area in Sonora has been Dr. Cooper's major task during the year when in the office. In odd moments he has proceeded with the monograph on "Chazyan and Related Brachiopods" to such effect that 114 of the 130 plates are now mounted and numbered.

Dr. T. Wayland Vaughan, associate in paleontology, has been occupied with the Cenozoic corals and the larger Foraminifera and has cared for the study collections of these two groups of fossils, of which he is the leading authority.

As in the past, members of the Geological Survey with offices in the Museum building have continued, in the course of their professional duties, to employ our collections in their researches.

Dr. Charles Butts is completing his volume on the geology of the Appalachian Valley of northern Virginia and has been checking the fossil collections made in the course of his study. Dr. J. B. Reeside, Jr., has almost finished the identification of a large collection of Triassic fossils made in Sonora by Dr. Cooper and two collaborating geologists. Dr. R. W. Imlay has made further progress in his studies of Jurassic and Cretaceous fossils from the western United States, Mexico, and Venezuela. Dr. H. E. Vokes is carrying on part time research on Mesozoic and Cenozoic pelecypods. Dr. L. W. Stephenson is completing his manuscript on the fauna of the Lewisville beds of the Texas Cretaceous which represents some years of work on the subject. Dr. Edwin Kirk is now occupied with Devonian and Carboniferous crinoids and has several papers in preparation. L. G. Henbest is progressing with his work on fossil Foraminifera and caring for the collections thereof. Dr. R. W. Brown has nearly finished his description of the Paleocene (Fort Union) flora which has a significant bearing on the determination of the Mesozoic-Cenozoic boundary. Dr. C. Wythe Cooke, in connection with a volume on the geology of Florida, has studied the Cenozoic fossils, especially the echinoids.

Curator C. W. Gilmore completed and submitted for publication three manuscripts, entitled "A New Sauropod Dinosaur from the Upper Cretaceous of Missouri," in collaboration with Dan Stewart; "A New Amphisbaenid Lizard from Wyoming," in collaboration with Dr. Glenn L. Jepsen; and "A Slab of Fossil Turtles from the Eocene

of Wyoming, with Notes on the Genus *Echmatemys*." All these have been accepted for publication by various scientific journals. A manuscript describing a new species of carnivorous dinosaur from the Upper Cretaceous of Montana, based on a skull belonging to the Cleveland Museum of Natural History, is practically completed.

Geological material received for examination and report through official channels numbered 143 lots for the department, distributed as follows: General geology, 55; mineralogy and petrology, 69; invertebrate paleontology and paleobotany, 16; vertebrate paleontology, 7. Many of these consisted of large numbers of specimens requiring considerable time and study for their identification, and in addition numerous specimens were brought in person for firsthand determinations. There were 245 letters requesting information of geological nature referred to the divisions as follows: General geology, 84; mineralogy and petrology, 115; invertebrate paleontology and paleobotany, 26; vertebrate paleontology, 20.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The distribution of geological materials to various educational and research institutions, other Government departments and war agencies, and to individuals engaged upon scientific investigations was as follows: Gifts, 1,812 specimens; exchanges, 116 specimens; loans for study, 569 specimens; and transfers, 36 specimens.

Most of the gifts were collections sent to schools and colleges and scientific institutions, including a considerable one of Cambrian fossils and trilobites to the Geological Institute of Mexico, and another of 158 minerals and rocks to the Institute of Jamaica at Kingston.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The total number of specimens for the three divisions as given below is necessarily only an approximate estimate. It is computed by adding to the figures given last year the difference between the number of specimens received and those sent out.

Mineralogy and petrology	256, 431
Invertebrate paleontology and paleobotany	2, 401, 250
Vertebrate paleontology	29, 448
Total	2, 687, 129

DEPARTMENT OF ENGINEERING AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

ALTHOUGH the department was compelled to carry on its work this year with a less experienced and smaller staff than it has had in recent years, the collections in its charge were maintained. The work was accomplished, however, only by devoting less time and attention than usual to other essential activities. New accessions, for example, were 25 percent less than the average of the past five years; there was little effort made to acquire additions to the collections; scientific work was cut to a minimum; and new exhibition planning was abandoned. Little change in this situation can be expected until the war is ended and experienced professional personnel again becomes available.

A major change in organization, affecting other branches of the Museum as well as this department, was made on November 8, 1943. For many years the Museum's chief photographer served also as associate curator of the photographic section of this department's division of graphic arts. The increased attention required by the photographic collections and library in recent years, however, made it almost impossible for one man to carry on both activities. Accordingly, on the date mentioned, the associate curator was relieved of all duties concerned with the Museum's photographic laboratory.

A number of changes in the staff took place during the year. On July 12, 1943, Joseph W. Schutz, assistant curator, section of chemical industries, resigned to accept a position in the consular service of the State Department. Two members of the staff, Dr. A. J. Olmsted, associate curator, section of photography, and Dr. F. L. Lewton, curator, division of crafts and industries, retired on account of age on September 30, 1943, and March 31, 1944, respectively. In view of the manpower shortage because of the war both men were reappointed to their respective positions the day following their retirement. After many years of expert service as senior scientific aide, section of textiles, Mrs. Elizabeth W. Rosson was advanced on May 12, 1944, to assistant curator in that section.

In May 1944, at its own request, the Smithsonian War Committee, of which the head curator, Carl W. Mitman, was chairman, having accomplished in the two years of its existence all that it was organized to do, was dissolved by the Secretary. While thus relieved of one special assignment, Mr. Mitman continued to direct during the year the protective and custodial services established for the irreplaceable Museum collections stored outside of Washington.

ACCESSIONS

Accessions for the year totaled 164, comprising 1,388 specimens. This is a decrease of 52 accessions and 878 specimens compared with the previous year. The accessions were distributed as follows:

Engineering, 31 (87 specimens); crafts and industries, 62 (1,002 specimens); and graphic arts 71 (299 specimens). Of these the following are worthy of special mention:

Engineering.—From the viewpoints both of historical merit and of popular appeal, the acquisition of two automobiles holds first honors in the group of accessions in this division. One of these was a U. S. Army truck, one-quarter ton, 4 x 4, universally called a "jeep," and having the unique distinction of being the prototype of these famous World War II vehicles. Specifically the truck is one of the first series of 62 similar vehicles built in 1940 by the American Bantam Car Co. and later standardized and adopted by the Army for volume production. It was received by transfer from the War Department through Col. E. S. Van Deusen. The other automobile, now a part of the Museum's unique collection, is a Winton, 1903, and the first automobile to be driven across the United States. This historic journey from San Francisco to New York, requiring 63 days on the road, was made by H. Nelson Jackson, owner, Sewall K. Crocker, and a bulldog, "Bud," between May 23 and July 26, 1903. After preserving the car for over 40 years Colonel Jackson presented it to the Museum together with all the existing camping and touring equipment and spare parts carried along. He generously presented too his complete file of contemporaneous newspaper and periodical accounts of the trip.

The Museum's watercraft collections were materially enhanced by four valuable gifts. President Roosevelt presented through Ralph E. Cropley an original, kerosene-burning, brass-bulkhead lantern of the first S. S. *Mauretania*, 1907–1935. The lantern had been part of the furnishings of the first-class passenger lobby and now stands in the exhibition case with a handsome model of this famous vessel presented to the Museum by President Roosevelt some years ago. The marine department of the Cleveland-Cliffs Iron Co., with the cooperation of Comdr. W. M. Connelly, presented a beautifully made model of the Great Lakes steamer *William G. Mather*. Ore- and freight-carrying vessels of our great inland lakes were not represented in the Museum's collection, and so a model of this famous and typical vessel of its class is a most welcome and valuable acquisition. Through the interest of Philip A. Sawyer there were acquired two original builders' block models of sponge and shrimp boats respectively of the types used by the Tarpon Springs, Fla., fishermen. Many vessels have been built from these models in the past 40 years, the sponge boat being the design of Leonardis Paskalitis and the shrimp boat of Minas and Antonius Sarris. An interesting cooperative activity instituted by the department resulted in the acquisition of a model of the Chesapeake Bay skipjack *Carrie E. Price*. The plans of this vessel are an item of the Historic American Merchant Marine Survey maintained by the division. With these plans and with some material assistance rendered by the division's technicians, William E. Lee, president of the Washington Ship Model Society, constructed the model and presented it to the Museum.

To the division's extensive collections on power generation there was presented by the Peabody Engineering Corporation a full-size, sectionalized combination oil and gas burner such as is widely used for steam generation in power plants. The burner was invented and developed by Ernest H. Peabody in the early 1920's and is so de-

signed that in case of failure of one fuel the other may be instantly applied. A series of photographs of typical installations of batteries of these burners, together with a sectioned burner nozzle, augment the burner itself and provide a rounded-out educational exhibit of this important part of modern power-plant equipment. A unique exhibit illustrating improvements over the years in rotary rock bits used throughout the world in drilling for oil was presented by the Hughes Tool Co. Five original bits dating from 1909 to 1942 standing in holes drilled in a slab of rock give the visitor the opportunity not only to see what the improvements have been but also to understand the rock-cutting action and principle of the rotary drill. The bits and rock slab mounted before a background picturing a crowded oilfield together compose an attractive addition to the mineral technology exhibits of the division.

Other interesting additions to the collections were: 2 cabinetmakers' miter jigs and a hand-operated turning saw, presented by William H. Egberts and Mrs. Lloyd R. Hayes, respectively; 25 miniature internal combustion engines used in flying model aircraft, lent by Capt. J. J. Hanson; a small pocket type calculator, "Groesbeck's Calculating Machine," donated by Lt. John P. Roberts, U. S. N. R.; and a collection of over 200 photographic negatives of early automobiles presented by E. B. Blakely.

Crafts and industries.—The outstanding accession in the textile section was a group of specimens illustrating late developments in war textiles, exemplified by fabrics of cotton-backed, viscose twill, and "Sunbak," a wool-backed, viscose rayon interlining, designed especially for uniforms of the Army Air Forces. The applications of these fabrics are shown in two types of electrically heated flying suits, one worn under regulation garments, together with auxiliary equipment. Included in this group is an aviator's flotation suit made of "Tackle Twill," a strong, rayon and cotton fabric. A supplemental exhibit consists of parts of an F–2 type suit showing the electric-wire interlinings and inserts. The acquisition of these materials and their unique presentation were made possible by the joint cooperation of William Skinner & Sons and the General Electric Co. A coil of nylon rope similar to that now being used by the Army Air Forces for towing gliders and representing another of the diverse uses of this synthetic fiber, was lent by the Plymouth Cordage Co. Modern blended-yarn dress goods, made of various combinations of rayons with aralac (a casein product), and wool, were received from J. P. Stevens & Co. The Cotton-Textile Institute continued its cooperation by supplying specimens of representative cotton fabrics made for the spring and summer of 1944. Recent types of special wire coils, produced by automatic winding machines, were furnished by the Universal Winding Co. to supplement their standard windings of previous years.

Through the courtesy of Mrs. Margaret Hayden Rorke, secretary and managing director of the Textile Color Card Association of the United States, the section received the Ninth Edition of the Standard Color Card with its supplements, the United States Arms and Services Color Card, and the United States Army Standard Thread Card. The Association is supported by textile manufacturers and representative firms of almost every industry using color. These firms agree to have their products match the colors included in the official standard card,

resulting in a great saving of time to consumers in obtaining exact shades of colors in materials which are to be used together. This standardization is especially valuable to the United States Arms and Services, each service having an official color requirement for its uniforms, trimmings, badges, and similar equipment. The Standard Thread Card is furnished by the Quartermaster General's Office to quartermaster depots and contractors making clothing or equipage for the United States Army. The Standard Ninth Edition Color Card showing 216 shades is not only of value to all color-using industries, but also of service as a standard reference for schools, colleges, libraries, advertising firms, printers, and publishers.

Noteworthy gifts to the homecraft textile collections included the following: An 1833 counterpane woven in "Double Bowknot" pattern, from Mrs. Lucy Holder Pratt; 2 jacquard type coverlets, one bearing the American eagle mark of Harry Tyler, 1845, from Miss Clara R. Walker; 3 hand-woven coverlets, from the estate of Miss Rebecca E. Everly; an antebellum autograph quilt, pieced in silk hexagon-patch pattern, and signed by President Lincoln and officers of the U. S. Army, from Mrs. Mary Alice Hughes Lord; and an appliqued cotton quilt and a coverlet, from Miss Margaret A. R. Stottlemeyer. The collection of early colonial implements, used in household textile industries, was enhanced by a flax hetchel, dated 1739, a gift from Edmund U. Barley, and by a hardwood, umbrella-type swift, used for rereeling skeins of yarn, presented by Mrs. Harry L. Watson.

An important accession in the section of chemical industries was an exhibit from Rayonier Inc., illustrating the chemistry and applications of refined alpha-cellulose derived from wood pulp. Since the military services' requirements for ordnance purposes cover practically all the annual production of cotton linters, the manufacturers of rayon found it necessary to turn to alpha-cellulose for their raw material. The applications of the wood-pulp cellulose shown in the exhibit include rayon, molded and laminated plastics, cellophane, artificial leather, rayon tire cord fabric, and electric-arc welding rods. An exhibit illustrating the manufacture of urea formaldehyde and melamine compound plastic resins and their applications to molding, gluing, bonding, or coating purposes was received from the Plaskon Division of the Libby-Owens-Ford Glass Co. Vice President Henry A. Wallace presented the Museum with two robes made from strips of vicuña skin. The robes were presented to him by Srta. Rosa Prado, daughter of the President of Peru, on the occasion of his good-will tour to South America in May 1943. These examples of the lovely, soft, furlike covering of this rare animal were added to the collection of commercial furs.

A noteworthy accession in the section of woods and wood technology was a collection of 169 specimens of woods of Costa Rica, Panama, and Ecuador received from the U. S. Forest Products Laboratory. The collection was made in 1943 by members of the U. S. Forest Service in connection with the Latin American Forest Resources Project of the Department of Agriculture, sponsored by the Coordinator of Inter-American Affairs. Dr. G. W. Harley, Ganta Mission, Liberia, presented 42 finished specimens of hardwoods of that country, which are valuable additions to our collections. A fine set of 12 commercial woods of Cuba was transferred to the section by the Lumber and

Lumber Products Division of the War Production Board. Continuing its cooperation, the Navy Department transferred to the Museum samples of eight woods which had been recommended for use in building yards, docks, and ships. For exhibition, the Geo. W. McGuire Co. presented three lawn rakes made of white oak, and other native hardwoods, which they had developed as substitutes for the once-popular bamboo rakes of Japanese origin. The Handle & Excelsior Co. contributed specimens of wooden brush and shovel handles, and two all-wood rakes showing what can be done to conserve critical metals in the manufacture of these products.

In the division of medicine and public health the most valuable items were added to the section of pharmacy. These included a complete exhibit, a gift of Sharp & Dohme, Inc., illustrating the manufacture and use of dried blood plasma now effectively employed by our armed forces; from E. R. Squibb & Sons, a series of objects picturing the method of obtaining penicillin, a recently discovered miracle-performing bacterio-static drug; and a collection outlining the life history of Carl Wilhelm Scheele, the internationally famous apothecary, donated by Dr. George Urdang. Objects of importance added to the history of medicine section were the first portable X-ray machine known to have been operated successfully on a battlefield, from Dr. John Hunter Selby; the saddlebags of Dr. George M. Shafer, U. S. Army, an Ohio practitioner, from Minnie M. Shafer; a localizer, penetrometer, Buckey diaphragm, old-type interrupters, radiometer, tintometer, and other historical specimens utilized in the early application of X-rays as a therapeutic agent, from Dr. John Hunter Selby. The most valuable additions to the section of public health were a collection of materials illustrating dentistry and oral hygiene, and a series of 12 life-size models of normal and abnormal human hearts, gifts, respectively, of the American Dental Association and the American Heart Association, Inc.

Graphic arts.—The outstanding accession in the section of graphic arts was a French color print of the eighteenth century, "L'Amant Surpris," by C. M. Descourtis after F. Schall. This type of print, the *estampe galante*, is highly prized and much sought after by collectors. Descourtis was one of the important engravers of the period, and it is said that "L'Amant Surpris" is one of his masterpieces. Miss Mary Louise Carr was the donor. Walter Tittle, a well-known drypoint artist, presented the section with 19 examples of his work, following his special exhibition in the Museum in October-November 1943. Mr. Tittle's handsome gift included portraits of distinguished people, among them George Bernard Shaw, Jean Louis Forain, Arnold Bennett, and Aristide Briand. Three prints by the late Jerome Myers were the gift of Dr. Harry H. Shapiro through Mrs. Jerome Myers. One of the best-known artists of his generation in America, Myers dealt with humble themes revolving about his beloved Manhattan—city scenes, children at play, itinerant peddlers, and similar subjects. His prints and paintings are in more than a score of museums throughout the country. The gift included two self-portraits (a lithograph and an etching) and an etching in color depicting children in a park.

Commercial and reproductive wood engravings of the last quarter of the nineteenth century in America are common enough, but wood engravings which were both designed and executed by the artist are quite rare. Still more rare are the engraved blocks themselves. Mrs. Minerva C. Cleaves donated nine engraved blocks and two prints

made by her late husband, W. P. Cleaves, who engraved from his own designs. While Cleaves was not widely known he was an extremely able artist and a sensitive craftsman. His work is a desirable addition to our collection of American wood engraving of that flourishing period, the last quarter of the nineteenth century. VOKS, the Soviet Russian Society for Cultural Relations with Foreign Countries, gave the section six war posters produced by the hand-stencil process. No printing equipment is necessary in making posters of this kind, which the Russians have developed to a high degree. Guerrilla artists have used this method extensively in occupied territories where the absence of printing and transportation facilities practically eliminate other methods. Miss Zulema Barcons presented four block-prints, technical variations of the same subject, "Andromeda." Three of these prints are the result of new and original techniques, the fourth version being the typical "white line" linoleum engraving.

A fine old Dutch book, "Historisch Sterf-Huys door Franciscus Ridderus," printed by Joannes Borstius in 1668, was presented by Bert Bille. Among the interesting features of this book is the combination of Gothic and Roman type and the sturdy, original parchment binding. An example of fine printing, "Prelum to Albion," was the gift of the author and printer, Jackson Burke. This book, printed by hand on a hand press, is a history of the development of the hand press from the adaptation of the prelum, or winepress, to the "Albion," one of the latest and most widely used presses of the days before power.

Among other accessions of importance was a series of ten progressive proofs as well as the seven original zinc plates which were used in printing a most unusual 7-color job in offset-lithography. The original, a water-color by Dwight C. Shepler, was reproduced with astonishing fidelity. This accession was the gift of the Independent Lithograph Co. "Washington Crossing the Delaware," a steel engraving by P. Girardet after the painting by E. Leutze, was the gift of L. C. Herring; "The Holy Sepulchre," a Currier and Ives lithograph, was presented by Dr. B. O. A. Thomas; "Stony Pasture," an etching by Luigi Lucioni was an associate member's print of the Society of American Etchers; eight etchings by Theodore Bolton of New York, the well-known writer on early American art, were the gift of the artist; and one facsimile of an old newspaper, "Gazette Litteraire Pour la Ville & District de Montreal. Mercredi, 17 Fevrier, 1779," was presented by the Gazette Printing Co. Fleury Mesplet, who founded and edited the newspaper, was secretly appointed by the Continental Congress in 1776 to set up a press in Canada to propagandize against the Crown. This newspaper was his vehicle.

The most important accession received by the section of photography was William J. Nagel's gift of a set of rectilinear lenses made by E. Francais, Paris, France. Singly and in combination the set provides nine focal lengths from 5¼ to 16 inches, covering angles from 50° to 90° with plate sizes from 3¼ by 4¼ to 10 by 12 inches. The Brenner Photo Co. indicated its continuing interest in the collection by a number of gifts. Included were an Agfa flash lamp, an oil-burning dark-room lamp; a Pathex motion-picture camera, an Irwin movie camera, a Wizard lens, and a Weno Hawk-eye camera. George W. Harris, a student of the history of photography, presented 53 items, including an album, a stereoscope, and 51 daguerreotype and ambrotype portraits all in very fine condition. Miss Cora Marshall presented

the section with a family heirloom in the form of a gold locket containing two tintypes, while Ransom Matthews presented 11 specimens of historical motion-picture film.

Other interesting specimens added to the photographic collections were: A No. 1 Panoram Kodak of 1894 presented by Miss Jackie Martin; an early 16-mm. motion-picture camera manufactured by De Vry, donated by Harry H. Olmsted; an early pocket Kodak, model of 1896, from Dr. A. J. Olmsted; and a Lauers patent revolving photograph cabinet, used about 1870, together with a 30 by 30 inches curtain slide plate holder used on an eclipse expedition in 1900 at Wadesboro, N. C., deposited by the Smithsonian Institution. Pictorial photographs for the permanent collection were received from Edward F. Raynolds, Eleanor Parke Custis, and the Smithsonian Institution, while an Agfa color plate with a color reproduction was presented by the color specialist Rex Soice.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Additions to the collections of this department fall within one or the other of two general classes—exhibition and study. They are of innumerable categories and must be incorporated with the older objects of their particular class. Accordingly, with the inflexible areas available to the department, the first major curatorial task year after year is that of properly accommodating two specimens in an area formerly occupied by one. The second major task is guarding the collections against destructive agents—sunlight, air conditions, dust, water, insects, and vermin. These two tasks consume fully 75 percent of the time allotted for the conduct of this important function of the department. Examples of the variety of work performed during the year are as follows:

Engineering.—Progress continues to be made in improving the appearance of the exhibits, especially those contained in the Aircraft Building. Many hours of hard labor on the part of the staff were necessary to produce this result. Better arrangement of the stored material in the Aircraft Building was effected through the acquisition of a lot of standard quarter-unit storage cabinets. All the exhibition cases in the transportation hall of the Arts and Industries Building were cleaned and also some of those in the power hall. This involved the removal of all the specimens, cleaning them, and washing the cases and glass. Many of the quarter units in the various rooms were rearranged and the study material replaced for more efficient use. Work continued on the cataloging and classification of the collection of prints presented last year by the Baltimore & Ohio Railroad. Twice during the year all the cases containing fabrics, as well as specimens parts of which are of textile material, were treated with fumigants.

Several reinstallations of exhibits were made during the year in the boat hall, and one diorama of a primitive oil refinery was completed in the engineering laboratory and placed on exhibition in the fuel court.

Crafts and industries.—Seventeen new installations and 47 rearrangements of the textile collections were made, and six additional cases were added during the year. The most impressive installation was one composed of war textiles in which the uniforms of the Army Air Forces were shown on lay figures. Against a colorful curtain "sky-

drop" and illuminated by fluorescent lights, it attracts the attention of all visitors. In the south hall, cotton fabrics and blended rayon dress goods were pleasingly exhibited. The series representing ornamentation of cotton fabrics by printing was improved through an exchange of cases, which also enlarged the storage space. Four additional cases were placed in the space allotted to homecraft textiles in the east south range, one for shell-work, another for unusual handmade rugs, and the other two for historical quilts. Specimens for the coverlet collection were installed, and necessary changes were made to preserve the scheme of classification. Textile implements, removed from the south hall, were placed in the large wall case containing the series illustrating the preparation of homespun cotton, wool, and linen yarns. The east end of the east south range gallery was opened and utilized for such items as tapestry loom models and work samples. The resulting space has facilitated passage through the building and has improved the entire gallery.

During the year all exhibition cases in the wood court were washed inside and out. This necessitated the removal and reinstallation of 10 exhibits containing hundreds of specimens. Where necessary, new labels were printed and some material was rearranged. Very little progress was made with the study collection in cutting woods to size for convenient handling. Of the 323 added this year, 110 were either received in or have been cut to proper size; 213 remain to be cut. In the course of identifying woods for war agencies, however, a number of unidentified specimens in the collection were classified and entered in the generic index.

To provide exhibition space for two vicuña-skin robes it was necessary to reinstall three cases. These were in the fur series and included the Alaskan sealskins and the processed rabbit and muskrat skins. The change added to the attractiveness of the specimens as well as to the alcove in which the exhibits of furs are shown on the south gallery. To make available two cases for the installation of the new specimens of plastics and rayon received from the Libby-Owens-Ford Glass Co. and Rayonier Inc. the exhibit of wood-pulp alpha-cellulose from Brown Co. and some of the chemical applications of cotton cellulose from E. I. du Pont de Nemours & Co. were retired. In the rubber section the case of reclaimed rubber and the two cases showing commercial forms of crude rubber were reinstalled. New bases were supplied for the bulletproof inner tube case and the rubber half-track for Army scout cars.

The principal work in the history of medicine section of the division of medicine and public health was the reinstallation of several cases to make possible the acceptance of a collection of apparatus relating to the early history of X-rays as a therapeutic agent, and to place the iron lung in the history of medicine line where it belongs. In the section of public health the dental diorama which had been in use for years was removed and a new unit installed in its place. The materials used in an exhibit devoted to heart disease were renewed. These include four small scenes showing the effect of preventable conditions which injure the heart, a series of 12 life-size models of the human heart in health and disease, vital statistics, and drawings illustrating the anatomy of the heart and the circulation of the blood. The work in the section of materia medica was directed toward obtaining necessary additions and replacing deteriorated specimens.

The drug and pharmaceutical materials were carefully checked, and specimens which had deteriorated were removed and replaced with fresh examples. The dioramas, exhibits, and models were cleaned, repainted, and altered to keep all parts of them up to date.

In addition to these various classes of work connected with the preservation of the collections, periodic fumigation of textiles and animal products was made.

Graphic arts.—The thorough cleaning and complete painting of the two principal exhibition halls in the Smithsonian Building assigned to the section of graphic arts necessitated first the protection in place of all exhibits. Upon completion of the painting and removal of scaffolds every exhibit had to be cleaned and rearranged before the halls were opened to visitors. Another major undertaking was the removal of all stored specimens from 34 wall cases in the chapel to allow for painting and carpentry work and the cleaning and replacement of these specimens following the completion of the work. A third piece of important work was the labeling and matting of the collection of twentieth-century American prints and their placement in 11 new solander storage cases for better protection.

The section of photography in the Arts and Industries Building made no changes in the arrangement of the exhibited collections. The establishment of the new office, library, storage and workroom of the section proved an arduous and long-drawn-out task. This involved the moving and rearrangement of all collections stored in the photographic laboratory and or the east-south range gallery as well as approximately 300 running feet of books comprising the photographic library.

In addition to these various activities the department arranged for and prepared the following special exhibitions during the year:

ENGINEERING

November: Paintings by Philip A. Sawyer, "Florida Sponge and Shrimp Boats."
January: Annual Exhibition Washington Ship Model Society.
February: Edison Day, "Inventions of Thomas Alva Edison."
April: Annual Exhibition, Metropolitan Society of Model Engineers.
May: Morse Centennial, "One Hundred Years of the Telegraph, 1844–1944."

GRAPHIC ARTS

July: 36 contemporary prints selected from the collections of the division of graphic arts.
August: 39 early American military prints on sheet music lent by the Misses McDevitt and Wright, Washington, D. C.
September: 35 prints by Jerome Myers, special memorial exhibit lent by Mrs. Jerome Myers, New York City.
October: 40 block prints by Zulema Barcons, New York City.
November: 42 drypoints and 1 etching by Walter Tittle, Danbury, Conn.
December: 48 etchings by Hans Kleiber, Dayton, Wyo.
January: 36 etchings by Cornelis Botke, Santa Paula, Calif.
February: 16 etchings and 19 drawings by Helen A. Loggie, Bellingham, Wash.
March: 40 etchings by Luigi Lucioni, New York City.
April: 17 lithographs, 20 drawings, and 5 illustrations by Ben Messick, Los Angeles, Calif.
May: 35 prints by 35 artists, selected from the collection of the division of graphic arts.
June: 18 Chinese watercolors from the collection of the division of graphic arts.

PHOTOGRAPHY

September: 43 pictorial photographs by Rowena Fruth, Connersville, Ind.
September: 145 pictorial photographs by members of the National Photographic Society, Washington, D. C.
October: 34 pictorial photographs by Frank A. Noftsinger, Roanoke, Va.
November: 50 pictorial photographs by Charles S. Martz, Aurora, Mo.
December: 51 pictorial photographs by members of the Camera Club, New York City.
January: 100 pictorial photographs by members of the Metropolitan Camera Club Council, Rockville Center, N. Y.
February: 75 pictorial photographs, the original of the plates shown in the "American Annual of Photography, 1944," lent by the American Publishing, Co., Boston, Mass.
March: 44 pictorial photographs by Arthur Hammond, Boston, Mass.
April: 71 prints, pictorial photographs by Edward C. Crossett, Wianno, Mass.
May: 28 pictorial photographs by David Darvas, Cleveland, Ohio.
June: 36 pictorial photographs by Hans Kaden, Jenkintown, Pa.

INVESTIGATION AND RESEARCH

Research was a daily requirement of the staff in order to furnish information to correspondents, Government bureaus, war agencies, and students and to identify materials forwarded to the Museum for identification. In addition specific and continuing research studies of several members of the staff were pursued as opportunities appeared.

Assistance to outside investigators was likewise a daily activity and was generally of two sorts—aid in the study of specific objects in the collections and pertinent literature and loans of materials for outside use. Examples of the first type of assistance rendered during the year are: Studies of certain woods and literature for a paper on "Uses of Wood in the Household during Colonial Days"; studies of the materia medica collections in connection with the development of a private museum; and studies of high-altitude flying oxygen apparatus in the collections in connection with a private research problem. Of the second type examples are: Preparing and furnishing 20 sets of important Latin American woods for traveling school exhibits; furnishing samples of cactus fiber for wicker furniture; preservation of a blood-stained Japanese flag; compiling an outline of waxwork technique; preservation of old linens; furnishing information on the kind of grinding faces used on millstones; on early methods of felt hat making; on brazil wood as a source of dye; on physical properties of woods suitable for archery; on identity of "perfume nuts," on the origin of the "jeep"; and on the history of the electric motor. It is estimated that 1,000 requests of this nature received attention in the department during the year.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Materials distributed from the department, including specimens, photographs, and prints, totaled a little over 3,000 items, or 1,000 less than during the preceding year. Almost nine-tenths of these are contained in the seven traveling exhibits of the graphic arts. These were on circuit throughout the year in 15 states. A total of 171 loans and gifts were made to educational institutions for exhibitions and experimental purposes and 305 items were transferred to other Government bureaus. During the year, too, 457 copies, over twice that of the previous year, of drawings and photographs contained in the Historic American Merchant Marine Survey maintained in the division

of engineering were furnished to private purchasers. This brings the total of such material distributed since the completion of the survey in 1938 to 3,979 copies.

NUMBER OF SPECIMENS UNDER DEPARTMENT

Engineering	17, 465
Textiles	15, 904
Woods and wood technology	13, 369
Chemical industries	23, 216
Agricultural industries, including foods	2, 233
Medicine and public health	20, 058
Graphic arts, including photography	47, 175
Total	139, 420

DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

THE past year was one of considerable activity for the division of history. The attention of the various members of the staff was directed toward several important projects, among them the reinstallation of the permanent exhibits located in the north and west halls, the improvement of the status of the storage collection, the installation of a number of temporary exhibits, and the rearrangement of the records and sectional library.

Much assistance was given in answering inquiries concerning the military and other collections.

The position of clerk-stenographer, held at the beginning of the fiscal year 1943 by Miss Virginia Galt, was abolished when Miss Galt resigned. A new position was created, that of scientific aide, and Miss Margaret W. Brown was appointed in December 1943. Under this new arrangement the work of the division was considerably advanced.

ACCESSIONS

The number of accessions received was 57. Individual specimens totaled 4,388, which was 2,485 more than for the previous year.

The collection of United States flags of historic interest was increased by two bunting flags of the period of the Civil War. One of these, presented to the Museum by Miss Grace D. Baylies, bears 34 stars arranged in the form of a large diagonal cross, with 4 stars arranged in a square in each angle of the cross. The other, presented by Miss Laura R. Little, has 36 stars arranged in 6 rows of 6 stars each.

The collection of civil, naval, marine, and military medals and decorations was increased by specimens of several awards of these types established during the present war. Among these were:

Specimens of the Air Medal, transferred to the Museum from the War and Navy Departments. This medal was established by Executive Order, May 11, 1942, for award to members of the armed forces of the United States who have distinguished themselves since September 3, 1939, by meritorious achievement in flight. It is second only to the Distinguished Flying Cross. It bears on the obverse a bronze compass rose suspended by a pointer and charged with an eagle flying downward to the left carrying thunderbolts.

Specimens of the decorations representing the four degrees of the Legion of Merit, namely, Chief Commander, Commander, Officer, and Legionnaire—received from the War and Navy Departments. These decorations were created by Act of Congress of July 20, 1942, for award to the personnel of the armed forces of friendly foreign nations and the personnel of armed forces of the United States and the Philippines. The recipients must have distinguished themselves by exceptionally meritorious conduct in the performance of outstanding services since the Presidential proclamation of emergency,

September 8, 1939. These decorations are the first to be founded by the United States Government for award to foreigners. The basic design is a 5-armed, double-pointed star of white enamel bordered with red, each angle of which bears two crossed arrows pointing toward the outer part of the star. The center of the star bears a gold medallion with a blue enamel center on which appear 13 5-pointed white stars arranged in the following manner: 1, 4, 3, 4, 1. The star is superimposed on a narrow wreath of laurel. The reverse of the medallion bears the legend "Annuit Coeptis," or "He [God] has favored our undertakings," this being the legend on the reverse of the Great Seal of the United States, the design of which was adopted in 1782. The reverse side of the laurel wreath, which is plain, bears the legend "United States of America."

Specimens of the Merchant Marine Distinguished Service Medal and the Mariner's Medal—received from the War Shipping Administration. The first of these, the Merchant Marine Distinguished Service Medal, was established by Joint Resolution of Congress, April 11, 1943, for award to any person in the American Merchant Marine who on or after September 3, 1939, "has distinguished himself . . . in the line of duty." The obverse of this medal bears a silver compass rose imposed on a compass card; the medal depends from a small eagle standing before two crossed anchors surmounted by a floral arch. The reverse bears a disk with the United States shield in the center surrounded by the legend "Distinguished Service, United States Merchant Marine." The Mariner's Medal is awarded to any seaman who, while serving on a ship during the war period, is wounded, suffers physical injury, or suffers through dangerous exposure as the result of an act of an enemy of the United States. Should any such seaman die from the wounds or injuries before the award can be made to him, the medal may be presented to the person named in the war-risk policy as his beneficiary. The medal consists of an 8-pointed bronze star upon which is superimposed a silver disk bearing an eagle standing on an anchor.

The collection of uniforms was increased by the addition of several United States Army and United States Military Academy uniforms of the early part of the twentieth century. These were presented by D. M. Lynn. Uniforms of the types worn by Army nurses and officers and members of the Women's Army Corps were received from the War Department. A series of German and Japanese uniforms captured in Italy and the Aleutian Islands was received as a loan from the War Department.

Interesting specimens added to the collection of coins and medals included a series of United States cents, nickels, dimes, quarters, and half-dollars struck at the Denver, Philadelphia, and San Francisco mints in 1943. These coins were transferred to the Museum from the Treasury Department. Interesting coins and medals were presented during the past year by the Honorable Frederic A. Delano as additions to the large and valuable series of such objects presented to the Museum by him during the previous fiscal year.

From Col. Hans Lagerloef was received as a gift a magnificent collection of Aguinaldo (Philippine) stamps totaling more than 2,000 specimens. A cover franked with a 2-cent red Aguinaldo stamp postmarked Bataan, a locality famous for the valiant fight against the

Japanese of the American forces under the leadership of Gen. Douglas MacArthur, is included.

The Post Office Department transferred about 1,500 stamps issued during the past year by the United States and foreign countries. Among these was a special series of 12 United States stamps commemorating countries that have been overrun and occupied by the Axis powers—Albania, Austria, Belgium, Czechoslovakia, Denmark, France, Greece, Luxembourg, Norway, The Netherlands, Poland, and Yugoslavia. Each stamp bears in color the national flag of the country concerned.

From the Postal Administration of Great Britain, through the U. S. Post Office Department, were received stamps of the Bahamas, Barbados, British Honduras, Malta, Newfoundland, Southern Rhodesia, and Tonga. Stamps issued for prepayment of postage on Jugoslavian warships and merchant vessels were presented by the Jugoslavian Government in exile in England also through the U. S. Post Office Department. The Soviet Union produced a 30-kopeck and a 3-ruble stamp showing the Russian, British, and American flags, commemorating the recent historic conference at Teheran. Among the stamps emanating from enemy countries that found their way into the Museum collections were two Japanese stamps commemorating the fall of Bataan and Corregidor, 11 stamps issued by the Japanese military authorities for use in the occupation of the Dutch Indies, and 14 varieties of Japanese stamps for the army of occupation in the Philippine Islands. A large number of German stamps also were received.

In all, 3,846 philatelic specimens were received during the year.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Exhibition work has been of special interest to the public owing to the large amount of civil, military, and naval materials included in the collections.

The most notable new exhibit installed by the division during the year was a series of United States naval and military medals and decorations of the types awarded by the United States War and Navy Departments during the period from the Civil War to the present war, illustrating the general development of such decorations during the period mentioned. Of special interest are the medals and decorations established during the present war, such as the Air Medal, the Legion of Merit Decorations, the Mariner's Medal, and the Merchant Marine Distinguished Service Medal. This exhibit was placed in the rotunda of the Arts and Industries Building.

Progress was made during the year in the installation of a series of civil relics and antiques in the west hall. Although the project was not completed, because of the lack of suitable exhibition cases, the general arrangement of the hall has, nevertheless, been much improved.

Several special exhibits were installed by the staff during the year, among them the following: Medals and firearms for the inspection of the Regents of the Smithsonian Institution on the occasion of the annual meeting of the Board of Regents in January 1944; relics of Samuel F. B. Morse, lent to the department of engineering for a special exhibition of Morse memorabilia installed in the north hall of the Arts and Industries Building on the occasion of the centennial anniversary of the sending of the first telegram in 1844.

Some improvement was effected in the status of the numismatic storage series by assembling this material in the two rooms at the north end of the historical suite. In this space many numismatic items of scientific and popular interest have been arranged in topical and chronological order, so as to be conveniently available for study purposes under proper supervision. This material includes ancient, medieval, and modern coins that are not so well preserved as similar coins now on exhibition. In addition, the space now also contains a large series of civil, naval, and military decorations of the United States and foreign countries arranged topically and chronologically and available for study and reference. These installations were made by James R. Sirlouis, scientific aide.

Except for the very recent issues and the stamps from Germany or from enemy-controlled countries, the cataloging of the postage-stamp collection is practically up to date. Exhibition was greatly improved during the year by the addition of new cabinets.

INVESTIGATION AND RESEARCH

During the past year the members of the scientific staff of the division continued their work in connection with the history of arms, flags, insignia, costumes, coins, and stamps.

Lots of material received for identification from outside agencies and individuals numbered 29.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Five lots (95) specimens, mostly firearms and drawings by official artists of World War I, were lent to individuals and Governmental agencies.

NUMBER OF SPECIMENS UNDER DIVISION

Art	1,593
Civil	16,235
Naval	2,238
Military	27,229
Numismatic	50,838
Pictorial	16,798
Philatelic	414,502
Total	529,433

ACCESSIONS DURING THE FISCAL YEAR 1943–1944

(Except when otherwise indicated, the specimens were presented or were transferred, in accordance with law, by Bureaus of the Government)

ABBOTT, THOMAS G., Washington, D. C.: Print entitled "George Washington's Last Interview with His Mother, 1789," from the original painting by W. H. Powell (166079).

ABBOTT FUND, W. L., Smithsonian Institution: 3,281 birds, plants, mollusks, mammals, and insects collected in Colombia by M. A. Carriker, Jr. (164565).

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, Philadelphia, Pa.: 52 plants from South America (166893, exchange).

ACUNA, Ing. JULIAN, Habana, Cuba: Plant from Cuba (165500).

AGELASTO, A. M., Alexandria, Va.: Heart-shaped jewel box of cloisonné enamel on copper (166219).

AGRICULTURAL EXPERIMENT STATIONS, Gainesville, Fla.: (Through Dr. A. N. Tissot) 8 insects (166939).

AGRICULTURE, U. S. DEPARTMENT OF:

Bureau of Entomology and Plant Quarantine: 97 isopods, 4 amphipods, 25 ostracods, 3 mollusks, and 3 fishes (165805, 166086, 166333, 166530, 166791, 166940, 166961, 167330, 167374, 167590); a colony of 3-banded Italian bees (167558 loan); 6 mollusks from England and the Azores; 6 amphipods, 1 isopod (167588); 57,000 miscellaneous insects retained by the various specialists out of material sent to the Bureau for identification, not covered by other accession records (167827).

Forest Service: 26 plants from Panama (166320); 5 plants from United States (166687); plant from New Mexico (167226); 264 specimens of woods collected in Costa Rica, Panama, and Ecuador during 1943, in connection with the Latin American Forest Resources Project (166689, 167405, 167539); (through J. L. Stearns) samples of 11 woods collected in Ecuador, Panama, and Costa Rica under the Latin American Forest Resources Project, 1943 (166577); (through W. A. Dayton) 96 plants from Costa Rica (165761, 165885, 166066, 166277).

Bureau of Plant Industry: 99 plants from Colombia (167294, 167683); plant from Arizona (167484); (through Prof. H. H. Bartlett) 121 plants (165638, 165737, 166609, 166860); (through Dr. J. T. Baldwin, Jr.) 164 plants from Matto Grosso, Brazil (166686); (through Dr. O. F. Cook) 5 plants (165755); (through A. C. Dillman) plant from Oregon (166892); (through Dr. T. H. Kearney) 6 plants from Arizona (166176, 167713).

AITKEN, Capt. T. H. G., New York, N. Y. (APO): 57 mosquito larvae from Egypt and Naples, Italy (167143).

ALABAMA GEOLOGICAL SURVEY, University, Ala.: (Through Dr. T. Wayland Vaughan) 11 cotype specimens of Foraminifera and some duplicates from Caledonia, Wilcox County, Ala. (165744).

ALBERTO, Brother TOMÁS, Salamina, Caldas, Colombia: 14 plants from Colombia (166643).

ALDRICH, Dr. JOHN W. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

ALEXANDER, Prof. C. P., Amherst, Mass.: 3 flies (1 larva and 2 pupae) from Japan (166292); 22 flies, including 11 paratypes (167086).

ALLARD, H. A., Arlington, Va.: 1,000 plants from Virginia and West Virginia (166688).

ALVARENGA, Dr. L., San Salvador, El Salvador: 2 slides of scale insects from El Salvador (167296).

AMBERSON, Lt. Comdr. J. M., M. C., Corpus Christi, Tex.: 14 mammals collected at Corpus Christi Naval Air Training Station (166013, 166107, 166205, 166572); (through Dr. Ernst Schwarz) 5 birds (116140).

AMBERSON, Lt. L., Myrtle Beach, S. C.: 28 mosquito larvae mounted on slides (166624).

AMERICAN BOSCH CORPORATION, Springfield, Mass.: Fuel injection system for Diesel engines (167594).

AMERICAN DENTAL ASSOCIATION, Chicago, Ill.: A collection of materials illustrating dentistry and oral hygiene (166026).

AMERICAN HEART ASSOCIATION, New York, N. Y.: A series of 12 life-size models of normal and abnormal hearts (166342).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.: An 82-gram slice of the Lowicz, Poland, meteorite (165762, exchange); cast of an extinct reptile skeleton (166989, exchange); casts of the bones of a flying reptile (167291, exchange); (through Dr. George H. Childs) 6 lots of parasitic worms (166454); (through Dr. Ernst Mayr) 20 birds (166834); (through John T. Nichols and Dr. C. M. Breder) 4 paratypes of fishes (165535, exchange); (through John T. Nichols and Dr. Samuel F. Hildebrand) 4 paratypes of fishes, new species by Hildebrand, collected January 6, 1920, by Dr. R. C. Murphy at Lobos de Tierra Island, Peru (166341).

AMERICAN NUMISMATIC ASSOCIATION, New York, N. Y.: (Through Sgt. David M. Bullowa) French coins as follows: 2 10-centime pieces, 1941; a 20-centime piece, 1941 (165725, loan); 7 coins of Italy and Tunis struck during 1939–1943 (167101, loan).

AMERICAN PHOTOGRAPHIC PUBLISHING CO., Boston, Mass.: 75 salon prints, reproduced in the American Annual of Photography, 1944 (166812, loan).

ANDREWS, Prof. E. A., Baltimore, Md.: 51,000 neritid mollusks and 850 microscope slides pertaining to the Neritidae (166211).

ANDUZE, Dr. PABLO J., Caracas, Venezuela: 7 flies, including 2 holotypes (167102).

ANGELL, J. W., New York, N. Y.: 2 beetles, topotypes (165614, exchange).

ANONYMOUS: 2 diffraction gratings; 30 photographic lenses, a collection representing various kinds in use over the past 70 years; a Leyden jar battery, a static electric machine, and X-ray tube; 1 14-by-17 American Optical Co. View Camera and 1 View tripod, 12-inch head, found in photographic laboratory and listed in an 1876 catalog as selling for $5; 3 bird skins (166691, 167186, 167187, 167628, 167831). Found in collection without number.

APOLINAR-MARÍA, Rev. Brother, Bogotá, Colombia: 46 plants from Colombia (166436, 167105).

ARCHER, Dr. W. ANDREW. (See under Instituto Agronómico do Norte.)

ARCHINO, SAMUEL P., Washington, D. C.: About 1,200 mollusks from Trinidad, also 12 specimens of coral (165525).

ARKANSAS GEOLOGICAL SURVEY, Little Rock, Ark.: (Through H. E. Wheeler) Specimen of novaculite from Hot Springs, Ark. (167708).

ARNOLD, GEORGE. (See under National Museum of Southern Rhodesia.)

ARNOLD, LILLIAN. (See under University of Florida, Gainesville, Fla.)

ASHBURN, W. R., Woodbridge, Va.: 5 amphipods from a well (165546).

AUTO-ORDNANCE CORPORATION, New York, N. Y.: A Thompson submachine gun (165719).

AVILEZ, IGNACIO, Washington, D. C.: 31 specimens of Mexican paper currency (165739).

BAHOVEC, FRED, Baranof, Alaska: 1 sponge, 1 polychaete worm, 3 leeches, 2 crabs, 4 anemones, and some mollusks (165718).

BAKER, Capt. J. A., Ithaca, N. Y.: 21 mammals from Canada (166108, 166257, 166549, 166917).

BAKER, JAMES S., Washington, D. C.: Specimen of native silver and chalcocite from Cole mine, 1,200 level, near Bisbee, Ariz. (167824). (See also under Foreign Economic Administration.)

BALDWIN, Dr. J. T., Jr., Miami, Fla. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

BALL, Dr. C. R., Washington, D. C.: 2 plants from Texas (165499, exchange); 13 plants (166278, exchange).

BALL, WILLIAM HOWARD, Washington, D. C.: Collection of marine invertebrates, 1 insect larva, and 3 lots of mollusks from Dare County, N.C., and Virginia Beach, Va. (166137).

BALLS, EDWARD K., Arlington, Va.: 158 plants from Virginia (167839).

BANDY, MARK C. (See under Mr. Coope and Fernándo Araya Valdés.)

BANKS, Prof. NATHAN, Cambridge, Mass.: 25 amphipods (166932). (See also under Harvard University, Museum of Comparative Zoology.)

BARBOUR, Dr. THOMAS. (See under Harvard University, Museum of Comparative Zoology.)

BARCONS, ZULEMA, New York, N. Y.: 40 block prints with monotype combination, for special exhibition, September 27 to October 24, 1943 (166127, loan); 4 block prints of a single subject, "Andromeda," each print an individual variation of an original process developed by the donor (166835).

BARKER, R. WRIGHT, Houston, Tex.: (Through T. Wayland Vaughan) Thin sections of 2 species of a foraminifer from near San Pedro Miradores, State of Veracruz, Mexico (165745).

BARKLEY, Dr. FRED A. (See under University of Texas.)

BARLEY, EDMUND E. (See under Edmund U. Barley.)

BARLEY, EDMUND U. (deceased): (Through Edmund E. Barley) Flax hetchel, dated 1739, which was used for 200 years by members of the Barley family in Ulster County, N. Y. (165907).

BARTLETT, Dr. H. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

BARTLETT, Capt. ROBERT A., New York, N. Y.: Marine invertebrates, echinoderms, mollusks, fish, insects, and plants, from northern waters; also some fossils (165293).

BARTLEY, FLOYD, Circleville, Ohio: 2 plants from Ohio (167099).

BARTSCH, Dr. PAUL, Washington, D. C.: A collection of reptiles from Lebanon Farm, Virginia, made in 1943–44 (167715).

BAUGHMAN, J. L., Houston, Tex.: 7 fishes from Texas (166874).

BAUSOR, Dr. SYDNEY C., Salinas, Calif.: Plant from California (166759).

BAYER, Corp. FREDERICK M., Venice, Fla.: 28 mollusks from Florida (166271).

BAYLIES, GRACE D., East Orange, N. J.: (Through Mrs. Charles C. Burt) United States national flag made during Civil War (167155).

BEACH, JESSIE G., Washington, D. C.: 1 skin of yellow-billed cuckoo (167773).

BEAMER, Prof. R. H., Lawrence, Kans.: 6 paratypes of insects (166777, exchange).

BEAN, BARTON A., Washington, D.C.: 21 fishes from Barnegat Bay, Seaside Park, N. J., collected by donor in July and August 1926 (166532).

BEATTIE, R. KENT, Washington, D. C.: Rain cape of palm fiber collected by the donor from the Taiwan of central Formosa in 1928 (166542).

BEATTY, HARRY A., Christiansted, St. Croix: 4 mammals and 6 sets of bird eggs from Virgin Islands (166049, 166228, 166649, 167834). (See also under U. S. Department of the Interior.)

BECKER, Mrs. GEORGE F., Washington, D. C.: Two earthenware alabastra from an unnamed site near Sbeitla, about 60 miles southwest of Kairwan, Tunisia (166743).

BEEBE, Dr. WILLIAM, New York, N. Y.: Two fishes, holotypes, collected in Caripito, Venezuela, by the donor in 1942 (166264). (See also under New York Zoological Society.)

BEHR, Ensign E. A. (See under U. S. Navy Department.)

BEHRE, Dr. ELLINOR H., Baton Rouge, La.: About 40 marine invertebrates and 2 holothurians (165896). (See also under Louisiana State University.)

BEN DAY, Inc., New York, N. Y.: 1 framed screen of Ben Day film #509B (166579).

BENEDICT, J. E., Jr., Washington, D. C.: 13 plants from eastern United States (165711, exchange).

BENN, RAYMOND, Portsmouth, Va.: 5 projectile points and a chipped blade found in Portsmouth, Norfolk County, Va. (165529).

BEQUAERT, Dr. JOSEPH C., Boston, Mass.: 6 wasps—paratypes of 2 species (165555, exchange); 1 wasp, paratype (165953).

BERRY, Dr. C. T. (See under Johns Hopkins University.)

BILLE, BERT, Brandon, Wis.: 1 Dutch Bible, printed in 1690; 1 Dutch book, "Historisch Sterf-Huys," printed by Joannes Borstius in 1668; and 3 arrowheads from Wisconsin (167511).

BIRCKHEAD, HUGH, New York, N. Y. 13 birds from North Africa (165664, 165833).

BJORKMAN, JOHN G., Los Angeles, Calif.: 1 engraving on plastic of a composite subject including a statue of Robert E. Lee, with Lincoln, the Capitol, and P–38's in background (Pat. 2126088); 1 engraving on plastic of a mountain trout in colors (167469).

BLAKE, Dr. S. F., Arlington, Va.: 19 lots, 47 mollusks; 2 lots of crabs; 1 echinoderm; and 6 lots of fish, all from the Pleistocene of Wailes Bluff, Md. (166151); 1 metacarpal of a fossil seal from Calvert formation, Miocene, zone 10, Scientists Cliff, Calvert County, Md. (166547); 3 mollusks from Mona Island, Puerto Rico (167692).

BLAKE, S. T., Brisbane, Queensland: 76 specimens and 1 photograph of grasses from Australia (167510, exchange).

BLAKELY, E. B., Wallingford, Conn.: A collection of 209 photographic negatives of eary automobiles (166403).

BLISS, ELIZABETH B., Washington, D. C.: Collection of toy soldiers of the latter part of the 19th century (166770).

BLISS, Hon. and Mrs. ROBERT WOODS, Washington, D. C.: Woven, decorative tent border from the Yemen, Southwest Arabia (165905).

BLUE, GEORGE V., Washington, D. C.: Antique sugar bowl of Britannia ware (165690).

BLYSTONE, E. L., Ardara, Pa.: 1 wood frog found under 5 feet of shale rock at Ardara (165651).

BOHART, Ensign RICHARD M., Williamsburg, Va.: 15 slides, representing 15 species of mosquitoes, and 1 beetle (166909, 167624).

BOHLS, Dr. S. W., Austin, Tex.: 7 mosquitoes (166303, exchange). (See also under Texas State Board of Health.)

BOLTON, THEODORE, New York, N. Y.: 8 etchings by the donor (165853).

BOOS, C. M., Hyattsville, Md.: 1 specimen of sylvite and blue halite from mine of U. S. Potash Co. near Carlsbad, N. Mex. (166331).

BOTKE, CORNELIS, Santa Paula, Calif.: 36 etchings by Cornelis Botke, for special exhibition, January 3 to 30, 1944 (166626, loan).

BOTTIMER, L. J., Beltsville, Md.: A small collection of beetles, including the first recorded specimen of one species from Louisiana (165764).

BOURGEOIS, MARIE E., Mexico, D. F.: 1,490 mollusks, 10 caddisfly cases, 2 phyllopods, and 8 beetles from Mexico (165758, 166071, 166534).

BOURQUIN, FERNANDO, Buenos Aires, Argentina: A small collection of eggs, blown larvae, pupae, cocoons, and adults of Lepidoptera from Argentina; 5 insects, including 4 new to the Museum collections (165669, 167236).

BOWER, W. J., St. Petersburg, Fla.: 9 mollusks from Tampa Bay, Fla (166372, exchange); 8 eggs and a young octopus (166742).

BOWMAN, Dr. JOHN R., Pittsburgh, Pa.: 9 beetles, representing 6 species, all by types and 3 by paratypes as well (165496, exchange).

BRACELIN, Mrs. H. P., Berkeley, Calif.: 8 ferns from Peru (131387).

BRADLEY, WALTER W. (See under California Department of Natural Resources.)

BRECKINRIDGE, SOPHONISBA P., Chicago, Ill.: Silver cup made by the American silversmith T. J. Shepard and bearing an inscription including the name of Margaret Desha, the great, great grandmother of the donor (166402); sterling silver pitcher (American) made about 1856 and bearing maker's mark "Kinsey" (167252).

BREDER, Dr. C. M. (See under American Museum of Natural History.)

BRENCKLE, Dr. J. F., Mellette, S. Dak.: 21 plants, mostly from South Dakota (166652).

BRENNER PHOTO Co., Washington, D. C.: 1 Watkins exposure meter, 1880 and 1 amateur oil-burning dark-room lamp (165668); 1 Agfa flashlight lamp and 1 sparking flashlight lamp burning flashlight powder (165855); 4 pieces of early photographic apparatus (167047); 1 box camera and roll of film, of about 1900 (167528); 1 Weno Hawk-eye roll film camera #2, manufactured by Blair Camera Co., Rochester, N. Y. (167696).

BRIDWELL, J. C., Falls Church, Va.: 2 salamanders and a greensnake from Virginia collected in 1943–44 (167714).

BRIGHAM YOUNG UNIVERSITY, Provo, Utah: (Through Dr. Vasco M. Tanner) 3 weevils, paratypes of 2 species (165039, exchange).

BRINKMAN, A. H., Craigmyle, Alberta: 23 grasses from Canada (166524, 166782).

BRITISH MUSEUM (NATURAL HISTORY), London, England: 1 plaster cast of a carboniferous crinoid (holotype) (166955).;

BROOKING, Dr. A. M. (See under Hastings Museum.)

BROOKLYN BOTANIC GARDEN, Brooklyn, N. Y.: 184 plants from Ecuador and Peru (165795).

BROOKS, A. B. (See under Canadian Government, Department of Agriculture.)

BROOKS, Dr. JOHN L., New Haven, Conn.: 1 isopod from ant's nest (166236).

BROOKS, Mrs. MORGAN, Washington, D. C.: Pair of high white-kid buttoned shoes, period of the 19th century (165689).

BROWN, JOSEPH M., Arlington, Va.: Woman's costume consisting of scarf, jacket, and skirt of hand-woven abaca cloth, obtained by donor in 1909 from a woman weaver at Loreto or La Paz, southern Agusan Province, Mindanao, Philippine Islands (166640).

BROWN, W. L., Washington, D. C.: 2 squirrels collected at Goldsboro, N. C., December 12, 1929 (166573).

BUEHLER, Dr. H. A., Rolla, Mo.: A specimen of flintlike clay, boehmite, from near Swiss, Gasconade County, Mo. (166990).

BULLOWA, Sgt. DAVID M (See under American Numismatic Association.)

BURCH, JOHN Q., Redondo Beach, Calif.: Approximately 1,000 mollusks from Redondo Beach (166694).

BURKE, JACKSON, San Francisco, Calif.: 1 book, "Prelum to Albion" by Jackson Burke (167776).

BURKE, Pfc. JAMES P., San Francisco, Calif. (APO): 101 butterflies representing 35 species or forms, of which 22 are new to our collection (167251).

BURKE, Mrs. PAULINE WILCOX, Washington, D. C.: Silver medal of Pope Leo XIII, 1891, and photographs of two portraits of Emily Tennessee Donelson (165821).

BURRILL, A. C., Jefferson City, Mo.: A collection of miscellaneous insects (166003).

BURT, Mrs. CHARLES C. (See under Grace D. Baylies.)

BURT, Prof. CHARLES E., Winfield Kans.: 140 mollusks from Germany (167138).

BURTON, ROBERT E., San Francisco, Calif.: 14 plants (grasses) from New Hebrides (167418).

BUTTS, Dr. DONALD C. A., Washington, D. C.: 2 snakes, 4 frogs, and 2 birds from Trinidad and British Guiana (166339).

BUXTON, Prof. P. A., London, England: 20 mosquitoes, representing 8 species (166698).

CABAL C., ADRIANO. (See under Colombia Department of Agriculture.)

CABALLERO C., Dr. EDUARDO, Mexico, D. F.: 4 cotypes of helminths (167353, 167468).

CALDWELL, Dr. J. S., Circleville, Ohio: 1 paratype of insect (165608, exchange).

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 21 plants from Mexico (164400, 165862, exchange); 27 plants from western United States (166552, 166750, 167600, exchange); 1 plant from Greenland (167027, exchange).

CALIFORNIA ART PRODUCTS, INC., Santa Monica, Calif.: 3 vases and 2 bowls of Hollywood ware (167281).

CALIFORNIA DEPARTMENT OF NATURAL RESOURCES, *Division of Mines*, San Francisco, Calif.: (Through Walter W. Bradley) 4 crystals of scheelite from Marengo district, San Bernardino County, Calif. (166696).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.: 694 plants from Peru (166933, exchange).

CALLAN, DR. E. McC., Trinidad, B. W. I.: (See under Imperial College of Tropical Agriculture.)

CAMERA CLUB, THE, New York, N. Y.: 51 pictorial photographs for exhibition during December 1943 (166599, loan).

CANADIAN GOVERNMENT, Ottawa, Ontario:

Department of Agriculture, Entomological Branch: 1 insect (166665); (through A. B. Brooks) 9 flies (166274); (through T. N. Freeman) 2 moths (164473); (through Dr. Robert G. Glen) 51 beetle larvae, representing 15 species; 10 specimens and cast of skins of 3 insect larvae (143991, exchange; 165954); (through Hugh B. Leech) 4 beetles, all paratypes (166520).

Geological Survey, Biological Division: 85 fishes received in 1918 partly from Canadian Stefansson Expedition to the Arctic, 1913–1916 (166258).

National Museum of Canada: (through H. T. Harkness) 186 plants from New Brunswick (167682, exchange).

CANFIELD FUND, Smithsonian Institution: 1 covellite specimen from Butte, Mont., and 1 libethenite specimen from Yerington, Nev. (167621).

CANNON, FRANCIS M., Washington, D. C.: Kentucky rifle of the early part of the 19th century (165901).

CAPITAL TRANSIT CO., Washington, D. C.: 3 models—2 street cars and 1 bus (166731, loan).

CARBORUNDUM CO., Niagara Falls, N. Y.: 4 transparencies illustrating the manufacture of carborundum (166523).

CÁRDENAS, Dr. MARTÍN, Cochabamba, Bolivia: 45 plants from Bolivia (165698).

CARNEGIE INSTITUTION OF WASHINGTON, Washington, D. C.: Oil painting by Joseph Lindon Smith entitled "Sculptured Bas Relief Below Temple of the Jaguars" at Chichen-Itzá, Yucatán (166153); the Albert Mann Diatom Collection, comprising approximately 8,000 mounted diatom slides, more than 200 diatom negatives, 300 lantern slides, several thousand of samples of crude diatom material (estimated about 10,000 to 12,000 samples), including bottles of recent material and fossil earths (167206).

CARNEGIE MUSEUM, Pittsburgh, Pa.: (through Dr. L. K. Henry) 521 plants (165989, exchange).

CARPENTER, Maj. STANLEY J. (See War Department, Fourth Service Command Medical Laboratory.)

CARR, MARY LOUISE, Washington, D. C.: A French color print, "L'Amant Surpris," after the painting by F. Schall, engraved by C. M. Descourtis (167264).

CARTWRIGHT, O. L., Clemson College, S. C.: 28 beetles, including holotypes of 8 species, paratypes of 5 other species (167555, exchange); 1 beetle (166171).

CASE, KATIE E., Davenport, Iowa: Bronze coat button of the type worn by admirers of William Henry Harrison, during the presidential campaign of 1840 (165915).

CASSEL, Sgt. JOSEPH F., Wyomissing, Pa.: 3 bird skins (165820).

CASTLE DOME COPPER CO., Miami, Ariz.: (through Harold D. Maryott) 2 wulfenites from the 4350 bench of the Castle Dome mine near Miami, and 1 lot of green druse (unidentified) (167471).

CAUVIN, ANDRÉ, New York, N. Y.: A collection of photographs by Mr. Cauvin entitled "Belgian Congo at War," for special exhibition during April 1944 (167055, loan).

CEOUGH, RICHARD, New York, N. Y.: Man's costume collected by the donor from the Chamula Indians of Zinacatan, Chiapas, Mexico, consisting of trousers and 2 ponchos of hand-woven cotton, a hand-woven woolen belt, a scarf, skin bag, and a double-weave straw hat (166543).

CHAMBERLAIN FUND, FRANCES LEA, Smithsonian Institution, Washington, D. C.: 1 pink topaz from Brazil, weighing 34.1 carats (165831).

CHANCELLOR, J. L. (See under Dr. G. W. Harley.)

CHANDLER, Prof. ASA C., Houston, Tex. (See under Rice Institute.)

CHAPIN, Dr. E. A., Washington, D. C.: 1 cast-iron pin tray in form of beetle, late 1800's (166276). (See also under Smithsonian Institution, U. S. National Museum.)

CHARDON, Dr. CARLOS E., Mayagüez, Puerto Rico: Specimen of plant (165898).

CHASE, Mrs. AGNES, Washington, D. C.: 356 grasses from Australia (165534, 165657, 195691, 166809, 167053, 167261, 167677); 17 grasses from China, collected by H. Sheehan (165616); 49 miscellaneous grasses (165776); 8 grasses from Fiji Islands (166891); 2 grasses from Argentina (167229); 107 grasses from various sources (167293).

CHICAGO NATURAL HISTORY MUSEUM, Chicago, Ill.: 2 ferns from Peru (166493, exchange); 58 plants largely from Guatemala (166895, exchange); 15 fishes (166995, exchange); 1 photograph of type specimen of plant (167014, exchange); 7 plants from Hawaiian Islands (167208, exchange).

CHILDRESS, Dr. M., Huntington, W. Va.: Pitted discoidal stone found near Unionville, Iowa (165799).

CHILDS, Dr. GEORGE H. (See under American Museum of Natural History.)

CHRYSLER, Prof. M. A., New Brunswick, N. J.: 7 photographs of ferns (166749.)

CLARK, Dr. HUBERT L. (See under Harvard University, Museum of Comparative Zoology.)

CLEAVES, Mrs. MINERVA C., Westfield, Mass.: 9 engraved wood blocks and 2 wood engravings, "Swift River, Conway, N. H." and "Intervale, Mt. Washington," by W. P. Cleaves (166110.)

CLEBSCH, ALFRED, Clarksville, Tenn.: 2 grasshopper sparrows (165882).

CLEMENT, Brother, Santiago, Cuba: 21 ferns from Cuba (165913, 167498).

CLEMENTS, J. MORGAN, Demopolis, Ala.: Chinese Buddha of wax coated with pearl nacre (165771); 2 Korean and 1 Chinese bronze mirrors, a small Chinese bronze vase and a piece Chinese knife money of the late Chou period, and 2 Chinese hair ornaments (165513).

CLENCH, WILLIAM J., Cambridge, Mass. (See under Harvard University, Museum of Comparative Zoology.)

CLEVELAND-CLIFFS IRON CO., Cleveland, Ohio: (Through Comdr. W. M. Connelly) Model of Great Lakes steamer *William G. Mather* (167194).

CLOSSON, A. B., JR., Co., Cincinnati, Ohio: 10 prints of scenes during the period of the Greely Relief Expedition, 1884 (165486).

CLOVER, Dr. ELZADA U., Ann Arbor, Mich.: 35 grasses from Arizona (166836).

COCKERELL, Prof. T. D. A., Boulder, Colo.: 3,981 bees from donor's personal collection (165878); 210 including many named bees new to the collection (167704).

COE, Prof. W. R., La Jolla, Calif.: 13 mollusks from California (166323, 167737).

COKER, Prof. R. E., Chapel Hill, N. C.: 15 slides of fresh-water copepods (11+ specimens) (165643).

COLOMBIA DEPARTMENT OF AGRICULTURE, Barranquilla, Colombia: (Through Adriano Cabal C.) A small collection of miscellaneous insects from Colombia (165487).

COLUMBIA INSTITUTION FOR THE DEAF, Washington, D. C.: Herbarium of the late John W. Chickering, Jr., consisting of 10,550 specimens of plants, mostly from the United States (167838).

COMISION DE BOTÁNICA, *Secretaria de Agricultura y Fomento*, Cali, Colombia: 119 plants from Colombia (166186, exchange).

CONARD, Prof. HENRY S., Grinnell, Iowa: 80 mosses (167013).

CONNELLY, Comdr. W. M., Washington, D. C. (See under Cleveland-Cliffs Iron Co.)

COOK, Dr. O. F. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

COOKE, Dr. C. WYTHE. (See under Hugh Iltis.)

COOKE, SAMUEL LEE, Upper Marlboro, Md.: 1 red-tailed hawk in the flesh (166625).

COOLEY, Dr. R. A. (See under Federal Security Agency, U. S. Public Health Service.)

COOPE, Mr., and FERNÁNDO ARAYA VALDÉS, Antofagasta, Chile: (Through Mark C. Bandy) 1 specimen of the María Elena, Chile, meteorite weighing 15½ kilograms (166302).

COOPER, Mrs. DELILA, Sylacauga, Ala.: (Through E. A. Kelly) 1 set of pharyngeal bones bearing teeth of the "freshwater drumfish," dug up in donor's yard (166252).

COOPER, Dr. G. ARTHUR, Washington, D. C.: 1,145 mollusks, 67 brachiopods, 3 starfish, and 7 barnacles, all from Sinaloa, Sonora, and Veracruz, Mexico (167736). (See also under Smithsonian Institution, U. S. National Museum.)

COOPER, Prof. K. W., Princeton, N. J.: 177 pinned beetles and 17 vials of alcoholic specimens from Barro Colorado Island, Canal Zone (167144).

COREA, Lt. LUIS F., Naval Air Station, Patuxent River, Md.: 150 specimens of marine shells from Gambia, West Africa (167693).

CORNELL UNIVERSITY, *Department of Zoology*, Ithaca, N. Y.: (Through Edgardo Mondolfi) A collection of frogs from Venezuela collected by Edgardo Mondolfi and Gaston Vivas-Berthier (166031).

CORNMAN, Mrs. M. ALICE, Washington, D. C.: 81 plants from Panama (166154); 33 plants from Florida (166702).

COTTAM, Dr. CLARENCE. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

COTTON-TEXTILE INSTITUTE, INC., New York, N. Y.: 27 cotton fabrics produced by American manufacturers for the spring and summer of 1944 (166813).

COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH, Canberra City, A. C. T., Australia: (Through William Hartley) 120 grasses from Australia (166109, exchange).

CRAIGHEAD, Ensigns FRANK C., JR., and JOHN H. (See under Smithsonian Institution, U. S. National Museum.)

CRAM, Dr. ELOISE B. (See under Federal Security Agency, U. S. Public Health Service.)

CREASER, Dr. EDWIN P., Brunswick, Ga.: 17 isopods (167546, 167676).

CROCKETT, Dr. R. L., Oneida, N. Y.: 137 plants from Texas (167753).

CROPLEY, RALPH E. (See under President Franklin Delano Roosevelt.)

CROSSETT, EDWARD C., Wianno, Mass.: 71 pictorial photographs (166246, loan).

CROWSON, Dr. ROY A., Kent, England: 4 insects (167416, exchange).

CURTISS, ANTHONY, Port-au-Prince, Haiti: A small collection of bats, reptiles, amphibians, fishes, crustaceans, and insects from Haiti (166605).

CUSTIS, Mrs. ELEANOR PARKE, Washington, D. C.: 4 pictorial photographs, "Port of Dreams," "Palaver," "Fog," and "Guardian of the Village" (167529).

CUTLER, Dr. HUGH C., São Paulo, Brazil: 10 plants from Bolivia (165537).

DAGGY, Lt. R. H., Bethesda, Md.: 36 insects (167181).

DAMPF, Dr. ALFONSO, Mexico, D. F.: A wood-rat skin from Sabinas, Coahuila (167079).

DANIEL, Brother, Medellín, Colombia: 84 mollusks and a small collection of insects from Colombia (165782, 166529); 59 plants from Colombia (166642, 167052).

DAPHNIS, Sgt. GEORGE, San Francisco, Calif. (APO): 1 grasshopper (167404).

DARTE, Mrs. M. H., Washington, D. C.: An oil painting entitled "An Incident of the Battle of Churubusco, August 20, 1847. Sergeant Kenaday Unloading a Powder Wagon" (167180).

DARVAS, DAVID, Cleveland, Ohio: 28 pictorial photographs for special exhibition, May 1–15, 1944 (167470, loan).

DAVIS, E. W., Washington, D. C.: 7,489 miscellaneous insects representing 638 species in 163 genera (165798).

DAVIS, Major H. A. (See under War Department, Army Medical Museum.)

DAVIS, Mrs. WILLIAM C., Arlington, Va.: Tiahuanacoid pottery vessel found east of Lake Titicaca between Conzata and Tacacoma, State of La Paz, Bolivia, purchased from the natives in July 1943 by William C. Davis (167680).

DAYTON, W. A. (See under U. S. Department of Agriculture, Forest Service.)

DECKER, Dr. CHARLES E., Norman, Okla.: 34 Cambrian brachiopods from Oklahoma (167642).

DEERING, A. J., New York, N. Y.: Cotype male of a tropical fish (165626).

DEGENER, OTTO, New York, N. Y.: 137 plants from the western United States (164630, 165903); 178 plants from Hawaii and western United States (165601).

DEICHMANN, Dr. ELISABETH. (See under Harvard University, Museum of Comparative Zoology.)

DELANO, Hon. FREDERIC A., Washington, D. C.: 42 coins, tokens, and medals and 2 Indian necklaces

(166088); 56 gold, silver, and bronze coins of the United States and foreign countries and bronze medals of the United States (166178); medals and decorations of France and the United States awarded to the donor in recognition of services performed during the First World War; a bronze medal presented to the Hon. James C. Peasley as one of the directors of the World's Columbian Exposition, Chicago, in 1893; a portrait medal of John Gutenberg, and bronze copy of gold medal awarded to George Washington by Continental Congress (13 specimens) (166361).

DEPARTAMENTO DE ZOOLOGICA, São Paulo, Brazil: (Through Dr. Oliverio M. de Oliveira Pinto) 1 bird skin (165986, exchange).

DEPAUW UNIVERSITY, Greencastle, Indiana: 106 plants (165796, exchange); 25 plants from Alabama (167148, exchange).

DESCHAPELLES, Ing. GEORGE B., Salida, Cuba: 20 beetles (165674).

DESERT SILVER, INC., Nivloc, Nev. (See under William J. Moore.)

DESIGN CENTER, INC., New York N. Y.: 8 black plastic recognition models of aircraft (167157).

DIEKE, Dr. G. H., Baltimore, Md.: 4 coccinellid beetles (166648).

DILL, WILLIAM A., Fresno, Calif.: 1 crayfish (166237).

DILLMAN, A. C. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

DISMANT, CARL I., Denver, Colo.: 1 specimen of gold ore from Itogon mine, Baguio, Benguet Province, Philippines (166469).

DOBSON, Dr. W. H. Yeungkong, Kwangtung, China: Specimen of Chinese "sack cloth" (167115).

DODGE & OLCOTT CO., Bayonne, N. J.: A specimen of oil of cajeput (165532); 6 2-ounce specimens of official medicinal oils for addition to materia-medica collections (167627).

DRAKE, Prof. CARL J.: Ames, Iowa: 5 lacebugs (1 a paratype), representing 4 genera (166255); 19 bugs, representing 12 species, 8 of which are represented by 11 paratypes (166619); 14 insects, representing 5 species of Hemiptera, 1 by a paratype (166808).

DREISBACH, R. R., Midland, Mich.: 3 insects, holotypes and a female paratype (165615).

DRYANDER, Mrs. EDITH, Cali, Colombia: 72 plants from Colombia (166187).

DUCHANOIS, Ensign F. R., Corpus Christi, Tex.: 1 fish and 1 shrimp from Corpus Christi Bay taken by J. O. Johnson, AMM 1/c, November 19, 1943 (166397).

DUNN, LAWRENCE H., Ovid, N. Y.: 1 insect, holotype (167625).

DUTILLY, Father, Washington, D. C.: (Through Dr. Hugh T. O'Neill) 78 miscellaneous insects collected by the donor in northwest Canada (165550).

EASTWOOD, Lt. KENNETH N., Washington, D. C.: Percussion lock target rifle, period of 1860 (166021).

EDMONDSON, Dr. C. H., Honolulu, T. H.: 4 mollusks from Hawaii (166124); 1 polyclad worm (166769); 1 vial each of eggs and adults of a new species of polyclad worms (167166).

EGBERTS, WILLIAM H., Washington, D. C.: 2 miter jigs (167772).

ELSON CO., INC., Belmont, Mass.: 3 reproductions in photogravure of old masters: "Angels' Heads," by Reynolds; "The Boyhood of Raleigh," by Millais; and a landscape "Return to the Farm," by Troyon (166364).

ELY, Prof. CHARLES A., Honolulu, T. H.: 6 echinoderms from Hawaii (165568, exchange).

EMERY, D. L., St. Petersburg, Fla.: 22 mollusks from Florida (166332).

EVERLY, REBECCA E., Macomb, Ill.: 3 hand-woven coverlets in plain, twill, and damask weaves; a printed and reversible Paisley shawl; 2 doilies embroidered in color and edged with Battenburg lace; a hardanger scarf and a large embroidered doily with crocheted edge (164228, bequest).

FAIRCHILD, Dr. GRAHAM B., Ancon, Canal Zone: 9 mosquitoes, representing 9 species, 7 by paratypes (166582).

FALKENAU, Col. ROBERT M., Washington, D. C.: 1 Hammond Multiplex typewriter, serial no. 229461A1, c. 1920 (166082).

FEDERAL SECURITY AGENCY:

Public Health Service, Bethesda, Md.: 4 mollusks from Florida (167523): (Through Dr. Eloise B. Cram) 234 mollusks from Florida, Louisiana, Texas, Alabama, and California (165722, 165790, 165792, 166517); (Through Dr. W. H. Wright) 1 specimen of dipterous insect (166259).

Public Health Service, Hamilton, Mont.: (Through Dr. R. A. Cooley) 6 ticks comprising 4 paratype adults and 2 paratype nymphs (166349, 166683); 44 lots of insects collected in Assam, India, by Dr. W. L. Jellison, 110 pinned specimens of miscellaneous insects and a collection of miscellaneous insects from the western States (167406); 23 vials of insects collected in Assam, India (167319).

Public Health Service, San Francisco, Calif.: (Through F. M. Prince) 6 fleas, paratypes (166721).

Public Health Service, San Juan, Puerto Rico: (Through Dr. Harry D. Pratt and J. Maldonado) A collection of miscellaneous insects taken in a trap lantern at the base of El Yunque in the Luquillo National Forest, Puerto Rico (166589); (through Dr. Harry D. Pratt) 128 mosquitoes and 11 slides of terminalia, comprising 58 adults and 70 larvae and representing 28 species, collected in Puerto Rico; 22 mosquitoes or parts (165656, 167623).

FENDRICK, Estate of Mrs. VIRGINIA S., Franklin County, Pa.: Invitation to the Inaugural Reception of President James A. Garfield and Vice President Chester A. Arthur at the National Museum March 4, 1881 (165919).

FENNAH, Dr. R. G., Castries, St. Lucia, B. W. I.: 105 specimens of lanternflies, representing 54 species, all type material including 45 holotypes, and 12 species of named material (165459); approximately 200 insects from Trinidad and 31 shells (165515); 26 insects representing 20 species, 16 of which are represented by type material (166610).

FERNALD, Dr. H. T., Winter Park, Fla.: 5 Lepidoptera (167048).

FERNALD, Dr. M. L. (See under Harvard University, Gray Herbarium.)

FERREYRA, Dr. RAMON. (See under Dr. Enrique del Solar.)

FESSENDEN, G. R., Washington, D. C.: 3 plants from the vicinity of Washington (167562).

FIELD, WILLIAM D., Washington, D. C.: 3,297 butterflies, including 37 holotypes and 160 allotypes and paratypes representing 40 species and varieties (166105).

FIGGINS, J. D. (See under University of Kentucky.)

FISCHER, O. H. (See under Union Diesel Engine Co.)

FISHER, Dr. A. K., Washington, D. C.: 29 lion claws from Ethiopia (166611).

FISHER, Prof. D. JEROME, Chicago, Ill.: A specimen of lithiophilite from the Black Hills of South Dakota (165528).

FISHER, GEORGE L., Houston, Tex.: 71 plants from Texas (166675).

FISHER, Dr. WALTER K., Pacific Grove, Calif.: 86 specimens of invertebrates including 2 abnormal starfishes from California (165547, 165848).

FISHERIES RESEARCH BOARD OF CANADA, *Atlantic Biological Station*, St. Andrews, New Brunswick: 4 amphipods from stream near Aulac, New Brunswick (166291).

FLORIDA POWER & LIGHT Co., Miami, Fla.: (Through Robert E. Pierce) Electric cable from Lake Worth, Fla., containing boring mollusks responsible for its destruction (167764).

FLORIDA, UNIVERSITY OF, Gainesville, Fla.: (Through Lillian Arnold) Specimen of grass from Florida (167542).

FLOYD, MARMADUKE, Savannah, Ga.: Archeological material from historic Indian burial site at Pallachucla Bluff on the Savannah River (165800).

FOLLANSBEE, Mrs. SADIE P., Washington, D. C.: Pair of epaulets owned by Commodore Joshua Follansbee, U. S. Navy (167174).

FOREIGN ECONOMIC ADMINISTRATION, Washington, D. C.: (Through Dr. C. D. Mell) 1 plant from Nicaragua (166490); 10 plants (166690); a collection of 15 minerals comprising 7 from Brazil, 5 from Africa, and 1 each from Colombia, Portugal, and Bolivia and consisting of columbite, tantalite, microlite, tapiolite, beryl, albite, topaz, garnet, ilmenorutile, and some unknown minerals (167825); (through James S. Baker) a specimen of tantalite (possibly mangano-) from Paraiba-Rio Grande do Norte area, Brazil (166919); (through Dr. C. D. Mell) 2 plants from Mexico (167228).

FORMAN, F. G., Perth, Western Australia: Specimen of manganocolumbite from Southwest Australia (167083).

FOSBERG, Dr. F. RAYMOND, Falls Church, Va.: 137 miscellaneous insects collected in Colombia (166908).

FOSHAG, Dr. WILLIAM F., Westmoreland Hills, Md.: Copper celts and stone artifacts from 3 sites in the state of Guerrero, Mexico (166293).

FOWLER, JAMES, Washington, D. C.: 15 isopods and approximately 55 amphipods from caves near Lexington, Va. (166346, 166945).

FOX, LORETTA E., Steubenville, Ohio: 2 seeds (167427).

FOX, Mrs. MARY, Custer, S. Dak.: 7 specimens of muscovite mica from White Spar mine near Custer, S. Dak. (165527, 165880).

FRACKER, Dr. S. B., Washington, D. C.: 2,309 hemipterous insects, 1,306 of these determined and representing 256 species (3 holotypes included) (166489).

FRASCHE, DEAN F., Washington, D. C.: 1 specimen of pitchblende, 1 of cassiterite, and 2 of malachite after heterogenite from Belgian Congo, and 1 of microlite from New Mexico (166907).

FRAYNE, Lt. (jg), Bainbridge, Md.: Type specimen of trematode (166468).

FREEMAN, T. N., Ottawa, Ontario: 2 reared specimens of Lepidoptera (167050). (See also under Canadian Department of Agriculture.)

FREY, D. G. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

FRICK, CHILDS, New York, N .Y.: Antelopelike fossil animal from Papago Springs Cave, near Sonoita, Santa Cruz County, Ariz. (167290); cast of antelope skull from the Miocene, Clarendon, Tex. (167591).

FRITZ, Dr. MADELEINE A. (See under Royal Ontario Museum of Paleontology.)

FRITZSCHE BROTHERS, INC., New York, N. Y.: 1 specimen each of American styrax, concrete Florentine oil, of orris root, bitter orange, N. F., and oil of eucalpytus, U. S. P. (165531, 167483).

FRIZZELL, Dr. DON L., Negritos, Peru: 8 lots and 1 slide of Eocene Foraminifera from Ecuador and 2 lots from Peru (166601).

FROESCHNER, RICHARD C., St. Louis, Mo.: 199 insects (165972).

FROST, C. A., Framingham, Mass.: 11 miscellaneous beetles (166685).

FRUTH, Mrs. ROWENA, Connersville, Ind.: 43 pictorial photographs (165906, loan).

FUNDAÇÃO ROCKEFELLER, Divisão Sanitaria Internacional, Rio de Janeiro, Brazil: 3 adults and 8 slides of mosquito material, all type or paratypes (166763).

FURNISS, M. (See under Gazette Printing Co.)

GABRIEL, Dr. ALTON. (See under U. S. Department of the Interior, Bureau of Mines.)

GAIGE, Mrs. HELEN T. (See University of Michigan, Museum of Zoology.)

GALINDO, PEDRO, Berkeley, Calif.: 4 slides of fly material, representing 3 species (166130).

GANIER, ALBERT F., Nashville, Tenn.: 2 grasshopper sparrows (165883).

GARDIA B., Dr. HERNÁNDO. (See under Instituto de Ciencias Naturales.)

GARDINER, CHANDLER B. (See under Johnson Automatics, Inc.)

GARNISS, Chief Warrant Officer WILLIAM BRADFORD, Washington, D. C.: Naval uniform, cap and coat; 5 naval medals; and one "crossing the line" certificate (167700).

GARRETT, FRANK W., Arlington, Va.: 1 specimen of pyrochroite from near Newport, Va. (166203).

GATES, PHILIP, Jr., Rockville, Md.: 1 specimen of micaceous mica from Charles Ridge, Spear, Avery County, N. C. (166204).

GAZETTE PRINTING CO., LTD., Montreal, Quebec: (Through M. Furniss) 1 facsimile copy of old newspaper, "Gazette Litteraire, Pour la Ville & District de Montreal. Mercredi, 17 Fevrier, 1779," printed by Fleury Mesplet (166128).

GENERAL ELECTRIC CO., Bridgeport, Conn., jointly with WILLIAM SKINNER & SONS, New York, N. Y.: 25 specimens including Army Air Force electrically heated F-2 and F-3 flying ensembles, on figures, scientifically designed and constructed by General Electric to maintain maximum body efficiency under all temperature conditions; wired interlinings (167341).

GEORGETOWN UNIVERSITY, Washington, D. C.: (Through Father Lawrence Gorman) 350 mollusks (166344).

GILBERT, A. C., New Haven, Conn.: 2 Virginia-deer skulls from British Columbia (167443).

GILLASPY, Corp. JAMES E., Orlando, Fla.: 1 burrowing lizard from Orlando (165606).

GILLIS, DAVID, Washington, D. C.: 2 ichneumon-flies (165566).

GILMORE, Dr. RAYMOND M., Washington, D. C. (See under Office of Coordinator, Inter-American Affairs.)

GINSBURG, ISAAC. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

GLASS, JEWELL J., Washington, D. C.: 1 lot of triplite from Tungstonia, Nev. (167643).

GLEN, Dr. ROBERT G. (See under Canadian Government, Department of Agriculture.)

GOLDBERG, LOUIS, Norwich, Conn.: 1 pair of steel ice skates with iron ankle brace and wooden sole piece and 1 pair of all steel ice skates with ankle brace (165850).

GOLDRING, Dr. WINIFRED, Albany, N. Y. (See under New York State Museum.)

GÓMEZ, Prof. JOSÉ ROYO Y., Bogotá, Colombia: Cast of the type specimen of a barnacle from the Cretaceous of Colombia (165063).

GORDON, Lt. W. M., San Francisco, Calif. (Fleet P. O.): 1 snake from New Guinea (167008).

GORMAN, Father LAWRENCE. (See under Georgetown University.)

GRANICH, Capt. LEONARD, New York, N. Y. (APO): 1 flea collected in Newfoundland (166692).

GRANT, Mrs. T., Turrialba, Costa Rica: 75 miscellaneous insects collected in Costa Rica (167153).

GREENE, GEORGE M., Harrisburg, Pa.: 1 skull of kingfisher (167234).

GREGG, Dr. WENDELL O., Los Angeles, Calif.: 5 mollusks from Utah (166739).

GUIDEY, LEO L., Morgan City, La.: (Through Dr. Samuel F. Hildebrand)

1 fish from Oyster Bayou Light Station, Morgan City, La. (165502).

GULF REFINING CO., Mattoon, Ill.: 7 cartons of well cores containing Devonian fossils (165029).

HABANA, UNIVERSITY OF, Habana, Cuba: (Through Dr. J. M. Osorio) 59 miscellaneous insects from Cuba (165786).

HADLEY, Sgt. JAMES E., San Francisco, Calif. (APO): 1 lizard and a small collection of insects from New Guinea (166268); 77 specimens, representing 44 species, of insects, millipeds, and spiders, and 2 crabs (166716).

HALE, Lt. Col. M. W., V. C., Quebec, Quebec: Skin and skull of a muskrat from Grosse Isle, Quebec (167629).

HALL, Capt. DAVID G. (See under Dr. C. H. T. Townsend.)

HALL, GLEN L. San Francisco, Calif.: (Through Dr. V. D. P. Spicer) 1 mollusk from Midway Island (165829)

HALSEY, Mrs. LEROY, Atlanta, Ga.: China cup and saucer used at the wedding of Angelica Singleton to Maj. Abram Van Buren in 1838 (167607).

HAMEL, CLAUDE C., Amherst, Ohio: 5 septarian concretions in marcasite from the Devonian rocks near Amherst (166040).

HAMILTON, HENRY W., Marshall, Mo.: Fragmentary textile samples and copper from Spiro Mound, on right bank of Arkansas River about 5 miles north of Spiro, Le Flore County, Okla. (166197).

HAMILTON, Lt. J., Greensburg, Pa.: 10 frogs from Salinas, Ecuador (167119).

HAMMOND, ARTHUR, Boston, Mass.: 48 pictorial photographs (167089, loan).

HANCOCK, ALLAN, FOUNDATION, Los Angeles, Calif.: (Through Dr. Olga Hartman) 14 polychaete worms collected by Sgt. Milo W. Williams at Biloxi, Miss. (167655).

HANDLE & EXCELSIOR Co., Picture Rocks, Pa.: 7 specimens of brush and shovel handles, 1 all-wood lawn rake, and 1 all-wood hay rake (165975).

HANSON, Capt. J. J., Washington, D. C.: 25 model gasoline aircraft engines (167087, loan).

HARBER, LESLIE ARMSTRONG, Washington, D. C.: 3 centipedes from St. Lucia, B. W. I. (166637).

HARDIE, ISABEL H., Washington, D. C.: 9 pieces of decorated brass, also a message tube of decorated bamboo from the Moro of Mindanao, P. I.; two spoons of chased brass from Algiers and a small earthenware vase from the Tewa pueblo of Santa Clara, N. Mex. (165988).

HARDY, Maj. D. ELMO, New York, N. Y. (APO): A collection of miscellaneous specimens of insects made by the donor in India (166741); 50 prepared slides of mosquito material, including 41 species, 8 new to our collection (167249); 10 lots of insects (167336); 200 slides of mosquito larvae and male genitalia from Assam, representing species of 6 genera (167402); 8,000 insects (slides, adults, pupae, and larvae), a few crustaceans, cestodes, mollusks, mammals, and fishes (167481).

HARGROVE, MARION C., Washington, D. C.: 2 gold watches and a watch fob of the period 1840–1850 (167395).

HARKNESS, H. T. (See under Canadian Government, National Museum of Canada.)

HARLEY, Dr. G. W., Ganta Mission, via Monrovia, Liberia: (Through J. L. Chancellor) 42 Liberian hardwoods (165810).

HARLOW, RICHARD C., Cambridge, Mass.: Specimen of cultivated fern (165497).

HARRIS, AILEEN, Washington, D. C.: 1 crystal locket containing on one side a portrait of a man and on the other a lock of hair (166571).

HARRIS, GEORGE W., Washington, D. C.: 1 album, 1 pocket stereoscope, 51 portraits (166627).

HARRY, HAROLD W., Portland, Oreg.: 11 mollusks from Oregon (167401).

HARTLEY, WILLIAM. (See under Council for Scientific and Industrial Research.)

HARTMAN, Dr. OLGA, Los Angeles, Calif.: 500 amphipods (166527). (See also under Allan Hancock Foundation.)

HARVARD UNIVERSITY:

Arnold Arboretum, Jamaica Plain, Mass.: 3 plants from China (161-536, exchange); 10 photographs of plants (165794); 3 grasses from Fiji (166546, exchange); 218 plants mostly from Australia (167509, exchange).

Botanical Museum, Cambridge, Mass. (Through Chas. Schwinfurth) 4 plants, mostly type material (165-775).

Gray Herbarium, Cambridge, Mass.: 356 specimens of plants, including 129 photographs and plates (165-558, exchange); 3 photographs of plants (165916, exchange); 6 photographs of plants (165990, exchange) 226 plants (166802, exchange); (through Dr. M. L. Fernald) 5 plants from Brazil (166212, exchange); (through Dr. Lyman B. Smith) photograph of a plant

(165875); 116 plants from Texas and Mexico (167740, exchange).

Museum of Comparative Zoology, Cambridge, Mass.: 3 mollusks from Chanaral (165858, exchange); 84 specimens of frogs, mostly new to the collections (167137, exchange); (through Prof. Nathan Banks) 1 beetle (166639, exchange); (through Dr. Thomas Barbour) 321 fishes, cotypes (165405, exchange); (through Dr. Hubert L. Clark) 6 brittle-stars, all paratypes (167051, exchange); (through William J. Clench) 12 paratypes of fossil mollusks from subway excavation in Boston, Mass. (167204); (through Dr. Elisabeth Deichmann) 53 alcyonarians (166789, exchange).

HASBROUCK, Dr. E. M., Washington, D. C.: 10 surf scoters (167244).

HASTINGS MUSEUM, Hastings, Nebr.: (Through Dr. A. M. Brooking) 1 fresh-water mussel from the Republican River, Nebr. (167522).

HAUGHT, OSCAR L., Barranquilla, Colombia: 1,421 plants from Colombia (167171).

HAY, Dr. W. P., Bradenton, Fla.: 1 mole from Englewood, Fla., collected July 15, 1943 (166015).

HAYES, DORIS W., Washington, D. C.: 2 plants from the District of Colombia (166491).

HAYES, Mrs. LLOYD R., Washington, D. C.: A turning saw of the period about 1860 (167145).

HAYES, Dr. WAYLAND J., Jr., Charlottesville, Va.: 3 slides of Turbellaria (167188).

HENBEST, Dr. LLOYD G., Washington, D. C.: A Harvey exposure meter of about 1915 (167295).

HENRY, Dr. L. K., Pittsburgh, Pa. (See under Carnegie Museum.)

HERDLICK, J. A., Forney, Idaho: A specimen of granite porphyry from the Salmon National Forest, Lemhi County, Idaho (166870); (through Frank L. Hess) 2 specimens of porphyritic granite from Lemhi County, Idaho (166697).

HERRING, L. C., Boston, Mass.: 1 steel engraving by Paul Girardet after the painting "Washington Crossing the Delaware," by E. Leutze; published by Goupil & Co. in 1853 (165484).

HERRON, Pvt. WILLIAM A., Fort Washington, Md.: 1 miniature copy of the Holy Bible (224 pages of the New Testament) with microscopic print (166968).

HERSHKOVITZ, PHILIP. (See under Walter Rathbone Bacon Traveling Scholarship and Oswaldo Mestre.)

HERZ, MAX, New York, N. Y.: Pair of Peck & Snyder racing ice skates, c. 1889, steel blades, mahogany foot piece (167502).

HESS, Dr. A. D. (See under Tennessee Valley Authority.)

HESS, FRANK L., Washington, D. C.: Specimen of uraninite from Gordonia District, Cape Colony, South Africa, and one of phosphuranylite from Rio Grande do Norte, Brazil (167524); a collection of concretions from Berthier-en-Bas, stations 8 and 9, 25 miles from Lévis, Canada (167738). (See also under J. A. Herdlick and Dr. Charles L. Parsons.)

HESTER, J. PINCKNEY, St. George, Utah: 1 flowering specimen and 10 photographs of a new species of plant from Nevada (166551); 12 plants from the southwestern United States (167383).

HILDEBRAND, Dr. SAMUEL F. (See under Leo L. Guidey, Donald R. Johnson, and American Museum of Natural History.)

HILL, A. T. (See under Work Projects Administration.)

HILLIER'S SON CORPORATION, R., New York, N. Y.: A specimen of Grindelia, NF, for materia-medica collection (167526).

HINTON, JAMES C., Mexico, D. F.: 3 ferns from Mexico (166862).

HOBBS, Dr. HORTON H., Gainesville, Fla.: 6 crayfishes, comprising holotype, allotype, and paratype of 2 new species; 6 isopods and 1 flatworm (166027).

HOFF, Dr. C. CLAYTON, Quincy, Ill.: 23 slides of ostracods (166845).

HOFFMAN, ANITA M., Mexico, D. F.: 2 mites in alcohol (167687).

HOFFMAN, ARNOLD, Livingston, Mont.: 2 calcite groups and a calcite crystal from Clyde Park, Mont. (166175); 1 specimen of calcite from Palm Wash mining district, Truckhaven, Calif. (166069).

HOLLAND, GEORGE P., Kamloops, British Columbia: 1 paratype specimen of flea (158805).

HOLMGREN, Dr. ARTHUR H. (See under Utah State Agricultural College.)

HOPKINS MARINE STATION, Pacific Grove, Calif.: 1 crab from Monterey Bay (167579, exchange).

HORNSTEIN, Dr. LILLIAN HERLANDS, Washington Square, N. Y.: 1 facsimile copy of a children's book of 1792, "The Royal Alphabet," or "Child's Best Instructor," to which is added, "The History of a Little Boy Found under a Haycock" (166126).

HORTON, F. W., College Park, Md.: 9 specimens of bauxite and miscellaneous minerals from Dutch Guiana and other localities (166025, exchange).

HOTCHKISS, NEIL. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HOUSEHOLDER, VIC H., Phoenix, Ariz.: 1 bird skin (166301).

HOWELL, Prof. B. F., Princeton, N. J. (See under Princeton University.)

HUBBARD, C. ANDERSEN, Forest Grove, Oreg.: 1 gopher, 7 meadow mice, and 3 tree mice from Oregon (167131).

HUBBS, Dr. CARL L. (See under University of Michigan.)

HUBRICHT, LESLIE, Norfolk, Va.: Small collection of invertebrates (166913).

HUGHES, Prof. R. CHESTER, Stillwater, Okla. (See under Carl Cecil Riguey.)

HUGHES TOOL CO., Houston, Tex.: An exhibit complete with exhibition case and appropriate background showing the development of the Hughes rotary rock bits from 1909 to 1942 (5 original specimens, exhibition case with painted background) (166122).

HULTEN, Dr. ERIC, Lund, Sweden: 44 grasses from Alaska (165902, exchange).

HUME, MATILDA E., Washington, D. C.: A Chamorro basketry-weave mat and an old Spanish brass pitcher, both collected on the Island of Guam by donor about 1920; also a nest of lacquered wooden boxes collected in China about 1880 (167836).

HUNGERFORD, Dr. H. B., Lawrence, Kans.: 5 bugs, 4 adults and 1 nymph (166362).

ILLINOIS STATE ACADEMY OF SCIENCE, Champaign, Ill.: (Through Dr. Lyell J. Thomas) 2 parasitic worms (166807).

ILTIS, HUGH H., Fredericksburg, Va.: 19 fishes, 75 marine invertebrates, 2 mollusks, and 12 echinoderms collected by donor off Cape Henry, Va. (166959); 45 fossil mollusks and 1 clump of fossil barnacles from Virginia (167046); 200 bryozoans and ostracods from the Miocene at Yorktown, Va. (167082, exchange); (through Dr. C. Wythe Cooke) 7 specimens (3 species) of fossil mollusks from the Eocene of Belvidere Beach and Fairview Beach, Va. (166873).

IMPERIAL COLLEGE OF TROPICAL AGRICULTURE, Trinidad, B. W. I.: (Through Dr. E. McC. Callan) 17 scorpions collected on Trinidad (165552).

INDEPENDENT LITHOGRAPH CO., San Francisco, Calif.: 10 progressive proofs of 7-color offset lithograph, "The Charles Street Meeting House," reproduced from the water color by Dwight C. Shepler; 1 finished proof No. 10, limited edition; 7 zinc lithographic plates used in making print (165650).

INSTITUTO AGRONÓMICO DO NORTE, Belém, Brazil: (Through Dr. W. Andrew Archer) 547 plants from Brazil (166810, exchange).

INSTITUTO DE CIENCIAS NATURALES, Bogotá, Colombia: 22 plants from Colombia (166121, 166924, exchange); (Through Dr. Hernándo Gardia B.) 105 plants from Colombia (166650, exchange):

INTERIOR, U. S. DEPARTMENT OF THE: 69 plants from Alaska (166587).

Bureau of Mines, College Park, Md.: (Through Dr. Alton Gabriel) 1 specimen of jadeite from Asia (167414).

Fish and Wildlife Service, Chicago, Ill.; 8+ fragments of crayfishes (165288); specimen of a very rare neuropteroid (167320); 262 specimens of miscellaneous insects, mostly identified and consisting largely of beetles, collected by Ernest G. Holt in Brazil (167699); (through Isaac Ginsburg) 42 gobies from Cuba (167771); 624 mammals transferred by the Fish and Wildlife Service and entered in the Museum catalog, Nos. 273562 to 274185 inclusive, between July 1, 1943, and June 30, 1944 (167835); (through Dr. John W. Aldrich) 2 eggs of hooded merganser (165708); (through Missouri Cooperative Wildlife Research Unit) 2 coyotes collected in Missouri in 1943 (166184); (through Dr. Clarence Cottam) 30 ostracods (164627); (through D. G. Frey) large collection of marine invertebrates and 78 mollusks from Chesapeake Bay taken by the Potomac River Oyster Investigation (166167); (through Neil Hotchkiss) 9 ferns, mostly from Alaska (167417); 9 U. S. flowering plants (167711); (through O. J. Murie) 1 skeleton of a bird (165330); (through Dr. Victor B. Scheffer) 8 pearly freshwater mollusks from Tule Lake, Siskiyou County, Calif. (166988); (through Dr. Lionel A. Walford) head of hammerhead shark collected off San Marcos Island, Gulf of California, by Dr. Walford, October 2, 1942 (166522).

Geological Survey, Washington, D. C.: 1 lot of purple muscovite; 1 specimen of microlite in pegmatite; 1 lot of yttrium-bearing spessartite garnet from New Mexico (166647); 5 specimens of tungsten ores from Idaho, California, and North Carolina (167173); (through Dr. Charles Milton) one lot of weinschenkite from Kelly Bank near Vesuvius,

Va., collected by H. D. Miser, October 1941 (166488); (through Dr. John B. Reeside, Jr.) 80 Devonian invertebrates from the Dyer formation of northwestern Colorado (166890); (through W. W. Rubey) Hewettite specimens from 1½ miles west of Bloomington, Bear Lake County, Idaho (167442).

National Park Service, Washington, D. C.: 31 plants from the Grand Canyon, Ariz. (165959); (through Harry A. Beatty) a collection of miscellaneous insects collected on the Virgin Islands (166602).

IRONS, JOHN A., Thousand Island Park, N. Y.: 1 mollusk (167620).

IRVING, F. N., Washington, D. C.: 4 plants from Maryland (166213).

JACKSON, Col. H. NELSON, Burlington, Vt.: Winton automobile, 1903, which, driven by the donor, was the first automobile to cross the United States from San Francisco to New York, together with accessories and camping equipment used on the trip (167685).

JACKSON, Dr. H. W., Blacksburg, Va.: 375 fresh-water mollusks from Virginia, 51 isopods and a few insects (165977); approximately 550 fresh-water snails from Virginia (166695).

JACKSON, RALPH W., Cambridge, Md.: 8 mollusks from Ecuador (166528).

JACOBSON, MORRIS K., Rockaway, N. Y.: 75 land and fresh-water mollusks from New York and Connecticut (166272); 6 mollusks from Peekskill, N. Y. (165791, 166316).

JAHNS, RICHARD H., Penasco, N. Mex.: Specimen of kämmererite from Klamath Mountain region, Oreg. (165793).

JAVIER, Brother E., Medellín, Colombia: Small collection of insects from Colombia (166269).

JELLISON, Maj. W. L., Hamilton, Mont.: 144 miscellaneous insects collected in China and India (166027); 137 insects, 1 crustacean, 2 snakes 4 flatworms, and a small collection of mollusks from Yunnan and Assam (166987); 25 fresh-water mollusks, from Lake County, Mont. (167160).

JENNINGS, C. C., Kingston, R. I.: A small collection of larvae, pupae, and adults of a beetle (165511). (See also under Rhode Island Department of Agriculture and Conservation.)

JOHNS HOPKINS UNIVERSITY, Baltimore, Md.: (Through Dr. C. T. Berry) 37 type and figured specimens of American Postpaleozoic fossil echinoids (165847, deposit).

JOHNSON AUTOMATICS, INC., Boston, Mass.: (Through Chandler B. Gardiner) Johnson automatic rifle (166548).

JOHNSON, Lt. (jg) DAVID H., Washington, D. C. (See under Navy Department.)

JOHNSON, Ensign DONALD R., New River, N. C.: (Through Dr. S. F. Hildebrand) 3 shrimps (166654).

JOHNSON, MARY PAULINE, Grantwood, N. J.: Album showing needlework specimens (167113).

JOHNSON & JOHNSON, New Brunswick, N. J.: Specimens of adhesive plasters and of plain mercurochrome and sulfathiazole band-aids (167527).

JONES, GROVER C., Peterstown, W. Va.: 1 diamond crystal weighing 34.46 carats found in April 1928 in Peterstown (167553, loan).

JONES, M. L., Hamburg, Iowa: 6 pieces of red cedar wood from the Missouri Loess Bluff Area in Waubonsie State Park, Iowa (166857).

KADEN, HANS, Jenkintown, Pa.: 36 pictorial photographs for special exhibition during June 1944 (167601, loan).

KARLOVIC, John K., Chicago, Ill.: 1 pepper-and-salt moth (165673).

KARRER, Mrs. S., Washington, D. C.: (Through Dr. L. P. Schultz) 2 palatine teeth of a fossil fish from the Miocene of Calvert County, Md. (165738).

KEARNEY, Dr. T. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

KELLY, E. A. (See under Mrs. Delila Cooper.)

KENK, ROMAN, Río Piedras, Puerto Rico: 10 specimens of sea urchins (165832).

KENTUCKY, UNIVERSITY OF, Lexington, Ky.: (Through J. D. Figgins) 5 bird skins (165983); (through Prof. Frank T. McFarland) 4 grasses from Kentucky (167409, 167569, exchange).

KER, Mrs. GRAHAM M. (deceased): (Through Graham Ker) 16th-century Spanish vargueno cabinet-desk (166363).

KIENER, WALTER, Lincoln, Nebr.: Fern from Nebraska (166653).

KILLIP, E. P., Washington, D. C.: 304 plants from Brazil collected by A. Ducke (165876); 61 plants collected by Mrs. Ynes Mexia (166803); 17 ferns from Panama (166958); 48 plants mainly from Plummers Island, Md. (167026). (See also under Smithsonian Institution, National Museum.)

KIMBALL, S. L., San Francisco, Calif.: (Through Dr. V. D. P. Spicer) 2 marine shells from Christmas Island and Midway Island (165830).

KING, Lt. (jg) WILLIS, Fort Schuyler, N. Y.: 356 reptiles and amphibians from the United States (166960).

KLEEREKOPER, Dr. HERM., Porto Alegra, Brazil: A collection of amphipods, isopods, ostracods, cladocerans, copepods, and insects (164520); 4 crabs from Brazil (166267).

KLEIBER, HANS, Dayton, Wyo.: 48 etchings by Hans Kleiber, for special exhibition November 29, 1943, to January 2, 1944 (166405, loan).

KLOTS, Capt. ALEXANDER B., Maxton, N. C.: 176 specimens of mosquito material as follows: 86 adults of 20 species; 90 larvae of 10 species (166563).

KNOWLTON, Dr. GEORGE F., Logan, Utah. (See under Utah State Agricultural College.)

KOMP, Lt. Col. W. H. W., Ancon, Canal Zone: 21 mosquitoes (166125); a small collection of miscellaneous insects taken on Galápagos Islands during April and May 1943 (166580).

KRUKOFF, BORIS A., New York, N. Y.: 901 plants from Bolivia (165696, exchange); 19 ferns from Brazil (165917, exchange).

KUGLER, Dr. H. G., Pointe-a-Pierre, Trinidad, B. W. I.: (Through Dr. T. Wayland Vaughan) 20 slides of thin sections, 1 of uncut specimens of B. Caudr's cotypes, topotypes, and plesiotypes of Eocene larger Foraminifera from San Juan de los Morros, Venezuela (166181).

KUTZ, H. L., Delmar, N. Y.: 5 skins of meadow mice, 1 skull (167112).

LABAW, J. P., Little Rock, Ark.: Specimen of bauxite obtained from "lignite" stockpile near Bauxite, Ark. (167644).

LAGERLOEF, Col. HANS, New York, N. Y.: 2,333 postage stamps of the Philippine Islands (166333).

LANE, JOHN, São Paulo, Brazil: 22 adults and 4 slides of Brazilian mosquitoes (167480).

LANG, FLORENCE RAND (deceased): (Through Carl Moon) The Florence Rand Lang Collection of 26 paintings by Carl Moon of Apache, Navaho, and Pueblo Indians of Arizona and New Mexico (165827).

LANGFORD, DANIEL B., Denson, Ark.: 76 mollusks from Arkansas and 27 from North Dakota (165914, 166179).

LA PLATA, EL MUSEO DE, La Plata, Argentina: 68 specimens of grasses from Argentina and Chile (167003, exchange).

LAPPE, WILLIAM M., Alexandria, Va.: 1 female black-widow spider found in Virginia (166340).

LAURENT, Mme. SUZANNE, Washington, D. C.: 1 waxbill (166369).

LAUSE, M. A., Dayton, Ohio: 2 self-loading, gas-operated, aircooled carbines (165356).

LAYBOURNE, W. LEE, Falls Church, Va.: 1 silver-haired bat collected at Falls Church, Va., October 5, 1943, by Mr. Laybourne (166185).

LEE, WILLIAM E., Alexandria, Va.: Model of the skipjack sloop *Carrie E. Price*, Baltimore, 1897 (167695).

LEECH, HUGH B. (See under Canadian Government, Department of Agriculture.)

LEMKE, RICHARD W., Arlington, Va.: 1 tourmaline and an aquamarine specimen from near Amelia, Va. (167766).

LEON, Rev. Brother, Vedado-Habana, Cuba: 123 grasses from Cuba (166612); (through Luis R. Rivas) 147 plants from Cuba (165576, 167152, 167734, exchange).

LEONARD, E. C., Washington, D. C.: 538 plants from Maryland (167775)

LEYVA, CARLOS J., Pluma Hidalgo, Mexico: 2 plants from Mexico (165779, 166089).

LIBBEY-OWENS-FORD GLASS Co., *Plaskon Division*, Toledo, Ohio: An illuminated mounted exhibit of 129 specimens and 17 photographs illustrating the manufacture and applications of urea-formaldehyde and melamine compound plastic resins, used for molding, gluing, bonding, and coating purposes (166991).

LIBRARY OF CONGRESS. (See under Mrs. W. E. Patterson.)

LILLY, ELI, & Co., Indianapolis, Ind.: 22 medicines for insulin and liver extract (166920).

LITCHFIELD, LAWRENCE, Jr. (See under Republic Mining & Manufacturing Co.)

LITTLE, Dr. ELBERT L., Jr., Washington, D. C.: 34 plants from Ecuador (166309, 166311).

LITTLE, LAURA REVERE, Brookline, Mass.: United States flag made in 1865 (166103).

LIZER Y TRELLES, CARLOS A., Vicente Lopez, Argentina: 15 insects, including 1 paratype and 3 species new to the collections (167182).

LLAVE, Ing. JOSÉ MANUEL DE LA, Uruapan, Michoacán: 4 wasps (166054).

LOEBLICH, Dr. ALFRED R., New Orleans, La.: (Through Dr. A. K. Miller) 22 Lower Cretaceous cephalopods from Texas, including types and figured specimens (165688).

LOGGIE, HELEN A., Bellingham, Wash.: 16 etchings and 19 drawings for special exhibition, January 31 to February 26, 1944 (166761, loan).

LOOMIS, H. F., Coconut Grove, Fla.: 15 millipeds, including 1 type and 14

paratypes, representing 15 species (165652).

LORD, Mrs. MARY ALICE (deceased): (Through Rose H. Lord and William Craige Lord, Glen Burnie, Md.) "Stars and stripes" bordered, autograph quilt pieced in silk hexagon-patch pattern with U. S. flag center motif, signed by President Lincoln, the line generals and lieutenant generals of the U. S. Army, and by other important Americans, made before the Civil War in Nashville, Tenn., by the donor, who carried it through the lines to Cincinnati, and back to Tennessee after the fall of Fort Donelson (166550).

LORD, ROSE H. (See under Mrs. Mary Alice Lord.)

LORD, WILLIAM CRAIGE. (See under Mrs. Mary Alice Lord.)

LOS ANGELES MUSEUM OF HISTORY, SCIENCE, AND ART, Los Angeles, Calif.: 1 hermit crab with 3 rhizocephalid parasites attached; also 3 rhizocephalid parasites unattached (154448).

LOUISIANA STATE UNIVERSITY, Baton Rouge, La.: (Through Dr. Ellinor H. Behre) 6 fishes (165890); 2 Texas red-shouldered hawks (166399, exchange).

LUCIONI, LUIGI, New York, N. Y.: 40 etchings by Luigi Lucioni for special exhibition, February 28 to March 26, 1944 (166969, loan).

LUNZ, G. ROBERT, Jr., Charleston, S. C.: 4 crabs, 10+ porcellanid crabs, 12+ shrimps (165768); 1 stomatopod taken off Kiawah Island, S. C., September, 9, 1943 (166521).

LUTZ, JOHN C., Philadelphia, Pa.: 2 insects (167829, exchange).

LYNN, D. M., Cleveland, Ohio: United States Army and United States Military Academy uniforms and accessories of the early part of the 20th century (31 specimens) (166143).

LYNN, Dr. W. GARDNER, Brookland, D. C.: A collection of amphibians and reptiles from Jamaica and Honduras made in 1941 (166407).

MACCORD, Capt. H. A. (See under Carl P. Manson.)

MACCREARY, Lt. DONALD, New York, N. Y.: 1 mouse and 3 lizards collected at the Island of Fernando de Noronha, Brazil, October 1943 (166300).

MACGEE, Mrs. ADA VAN LOON BRANDOW, Washington, D. C. (See under Susan B. Anthony League Foundation.)

MACMILLAN, GORDON K., Pittsburgh, Pa.: 2 mollusks (166941).

MACNEIL, F. STEARNS, Washington, D. C.: 30 mollusks from Marianna limestone, Clarke County, Miss. (167413).

MACY, Prof. RALPH W., Portland, Oreg.: 22 mollusks from Oregon (166590).

MAINE, UNIVERSITY OF, Orono, Maine: (Through Dr. F. H. Steinmetz) 3 ferns from Maine (166641, exchange).

MALDONADO, J. (See under Federal Security Agency, U. S. Public Health Service.)

MANN, Dr. WILLIAM M. (See under E. F. Remington.)

MANSON, CARL P., and Capt. H. A. MACCORD, Washington, D. C.: Archeological materials, including two incomplete skeletons, from Keyser Farm site, Rileyville, Page County, Va. (167292).

MANTER, Dr. HAROLD W., Lincoln, Nebr.: 4 slides of helminthological specimens (165923); 4 specimens on 3 slides showing types and paratypes of trematodes (166930).

MARCIN, Mr. and Mrs. EDWARD J., Flushing, N. Y.: A group of limonite pseudomorph after siderite from Rockside Quarry at Roxbury Station, Conn. (166343).

MARCUS, ERNESTO, São Paulo, Brazil: 1 mollusk shell perforated by a bryozoan (166005).

MARDEN, LUIS. (See under National Geographic Society.)

MARIE-VICTORIN, Prof. FR., Montreal, Quebec: 29 plants from Cuba (166674).

MARSH, KATE SESSION (deceased): (Through Washington Loan & Trust Co.) 67 miscellaneous ethnological and period art specimens of antique glass, china, lace, silver, brass, nephrite, and basketry (1666645, bequest).

MARSHALL, CORA, Pittsburgh, Pa.: 1 gold locket containing 2 tintypes, portraits of a man and woman (166570).

MARSHALL, ERNEST B., Laurel, Md.: 1 fox and 1 weasel collected at Laurel by Mr. Marshall in February and July 1943 (165961).

MARTIN, Miss JACKIE, Washington, D. C.: A #1 Panoram Kodak, Pat. 1894 (165852).

MARTIN, Sgt. JOEL, New York, N. Y.: 1 crab, 5 isopods, and 1 amphipod (166507).

MARTÍNEZ, Dr. MAXIMINO, Mexico, D. F.: 59 plants from Mexico (166541, 166654, 166676, 166921).

MARTZ, CHARLES S., Aurora, Mo.: 50 pictorial photographs (166294, loan).

MARY JOSEPH, Sister. (See under Mercy Hospital.)

MARYLAND ACADEMY OF SCIENCES, Baltimore, Md.: (Through Dr. E. H. Walker) 2 plants from Maryland 167559).

MARYOTT, HAROLD D., Miami, Ariz. (See under Castle Dome Copper Co.)

MASON, CHARLES, Baltimore, Md.: 1 crystal showing the octahedral habit of pyrite, sample from a quarry near Lexington, Va. (165600).

MATTHEWS, RANSOM, Los Angeles, Calif.: 11 specimens of historical motion-picture film (167681).

MAXON, Dr. WILLIAM R,, Washington, D. C.: 3 plants from Maryland (167684).

MAYOR, A. HYATT, New York, N. Y.: An Edison wood-case telephone receiver, c. 1870 (166629).

MAYR, Dr. ERNST. (See under American Museum of Natural History.)

MAZZOTTI, Dr. LUIS, Mexico, D. F.: 2 paratypes of a new species of bug (165742); 1 wood rat (166575); 1 insect (166794, exchange).

MCCLURE, Dr. F. A., Washington, D. C.: 2,500 grasses, mainly bamboos of economic importance, and a small collection of insects reared from bamboos, from tropical America (167092, collected for the Museum).

MCCOMB, W. H., Alhambra, Calif.: 2 trap-door spider nests collected in California (165881).

MCCORD, Mrs. JAMES B. (See under Anna McGowan.)

MCCOY, THOMAS N., Hickman, Ky.: 2 bryozoans (166238).

MCCULLOCH, JESSIE P., Longview, Wash.: 5 concretions with crab remains from the Tertiary rocks of southwest Washington (165962).

MCDEVITT, JOSEPHINE. (See under Edith A. Wright.)

MCDONALD, H. R., San Francisco, Calif.: 1 red-footed booby (166209).

MCFARLAND, Dr. FRANK T. (See under University of Kentucky.)

MCGOWAN, ANNA (deceased): (Through Mrs. James B. McCord, Washington, D. C.) 4-piece silver coffee service made by Browne & Seal, Philadelphia, about 1810, and a 19th-century bobbin-made Chantilly black-lace shawl (167322).

MCGUIRE Co., GEORGE W., Whitestone, N. Y.: 3 lawn rakes made of white oak and other hardwoods, developed as substitutes for the once-popular bamboo rakes of Japanese origin (165661).

MEDINA, Dr. ROBERTO CORS, La Paz, Bolivia: 34 rodents from Bolivia (167833).

MELL, Dr. C. D. (See under Foreign Economic Administration.)

MERCY HOSPITAL, Des Moines, Iowa: (Through Sister Mary Joseph) 2 fly larvae collected in Mercy Hospital (165670).

MERTIE, Dr. J. B., Jr., Washington, D. C.: 1 specimen of spodumene and vivianite from Kings Mountain, Cleveland County, N. C. (167641).

MESSICK, BEN, Los Angeles, Calif.: 19 lithographs and 18 drawings for exhibition (167133, loan).

MESTRE, OSWALDO, Magdalena, Colombia: (Through Philip Hershkovitz) Shell disk beads and shell pendants from "huaca" in Guanahani, Río Ariguani, about 20 km. south of Pueblo Bello, Sierra de Santa Marta, Magdalena, Colombia (165602).

METALS RESERVE Co., Washington, D. C.: Collection of minerals and ores (167739).

MÉTRAUX, Dr. ALFRED, Washington, D. C.: 37 plants from Argentina (163218).

METROPOLITAN CAMERA CLUB COUNCIL, Rockville Center, N. Y.: 100 pictorial photographs, exhibited during January 1944 (166661, loan).

MICHENER, Lt. CHARLES D., Camp Shelby, Miss.: 12 mosquito larvae representing winter and summer forms (167049).

MICHIGAN, UNIVERSITY OF, *Museum of Zoology*, Ann Arbor, Mich.: (Through Dr. Carl L. Hubbs) 137 fishes from Venezuela, collected by F. F. Bond, 1938–1939 (167214, exchange); 267 fishes from northwestern Mexico collected during 1940 and 1942 by Dr. Ralph G. Miller (167679); (through Mrs. Helen T. Gaige) 135 frogs and 27 salamanders (167716, exchange); 5 ferns from British Honduras (121540, exchange).

MICHEL, R., Washington, D. C.: 1 ruby-throated hummingbird (167507).

MIDDLEKAUFF, Capt. WOODROW W., Fort McPherson, Ga.: 12 mosquitoes, representing 7 species (166672); 2 slides of mosquitoes (166401); 2 mosquitoes, holotype and allotype (166244); 13 vials of mosquito larvae and 3 pill boxes of adults, all from southeastern United States (165973); 25 slides of mosquito larvae (165987).

MILLER, Dr. A. K. (See under Dr. Alfred R. Loeblich.)

MILLER, GERRIT S., Jr., Washington, D. C.: 10 plants from Vermont and New York (165918); 57 small mammals collected at Dorset, Vt., in the summer of 1943 (166564); 4 chipmunks and a young opossum from District of Columbia (167832).

MILLER, LUCRETIA C., Rochester, N. Y.: 6 specimens of tatted lacework (167114).

MILTON, CHARLES. (See under U. S. Department of the Interior, Geological Survey.)

MINISTERIO DA EDUCAÇÃO E SAUDE, Rio de Janeiro, Brazil: (Through Dr. R. M. Taylor) 2 mosquitoes (made

holotype and female allotype), with larval skins of both (166256).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 1 plant from Colorado (165777, exchange).

MOLDENKE, Dr. HAROLD N., New York, N. Y.: 27 grasses from Pennsylvania 165706); 1 plant from Colombia (167769).

MONDOLFI, EDGARDO. (See under Cornell University.)

MONTGOMERY, ARTHUR, New York, N. Y.: An aquamarine gemstone from Boise County, Idaho, weighing 15.3 carats (166965).

MONTOYA, Dr. ANTONIO, Capuli, Colombia: (Through Dr. W. H. Wright) 22 insects (167475).

MOON, CARL, Pasadena, Calif. (See under Florence Rand Lang.)

MOORE, Dr. J. PERCY, Philadelphia, Pa.: 6 leeches (166760).

MOORE, WILLIAM J. (deceased), Nivloc, Nev.: (Through Desert Silver, Inc.) 1 crystal of scheelite from Nivloc (165553).

MOREIRA, Dr. CARLOS, Rio de Janeiro, Brazil: 45 amphipods and 1 isopod (166588).

MORRIS, JOHN V., Washington, D. C.: (Through Dorothy R. Swift) 1 fox squirrel collected at Bluemont, Va. (166052).

MORRISON, Dr. J. P. E., Washington, D. C.: 5 skins and skulls of the house mouse and skins and skulls of the white-footed mouse from Virginia (166871). (See also under National Speleological Society.)

MORSE, Dr. EDWARD E., Washington, D. C.: 6 French bronze medals of the period of World War I (166832).

MOSELEY, Maj. KIRK J., Washington, D. C. (See under War Department, Division of Preventative Medicine.)

MURIE, O. J. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

MURRILL, Dr. W. A., Gainesville, Fla.: Plant from Florida (165498).

MUSEUM OF MODERN ART, New York, N. Y.: Special exhibition: "Bali; Background to War" (166188, loan).

MYERS, Mrs. JEROME, New York, N. Y.: 35 prints by Jerome Myers for special memorial exhibition, August 30 to September 26, 1943 (165920, loan); (See also under Dr. Harry H. Shapiro.)

NAGEL, WM. J., Bethesda, Md.: 1 combination set of lenses; 6 lenses, barrel, and set of stops, for varying focal length and angle of exposure (166544).

NASH, ARTHUR CLEVELAND, Washington, D. C.: An etching, "The Lost Chord," by Reginald Cleveland Coxe (165854).

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: (Through Luis Marden) 124 fishes from Nicaragua, including 3 sharks and 1 sawfish, 3 sawfish blades, and 2 snakes (165627, 165900, 166359); 49 fishes and 1 crustacean from El Salvador (166992).

NATIONAL LIVESTOCK AND MEAT BOARD, Chicago, Ill.: 16 pieces of table silverware and 3 doilies for the nutrition case (165488, 165736).

NATIONAL MUSEUM OF SOUTHERN RHODESIA, Bulawayo, Southern Rhodesia: (Through George Arnold) 122 ants, representing 32 species, of which 2 species are represented by paratypes (166519).

NATIONAL PHOTOGRAPHIC SOCIETY, Washington, D. C.: 145 pictorial photographs for exhibition during September 1943 (165921, loan).

NATIONAL PROCESS CO., New York, N. Y.: 1 color reproduction in offset lithography of "The Kill," a painting by Robert Benney (166785).

NATIONAL SPELEOLOGICAL SOCIETY, Washington, D. C.: 6 mollusks, 4 vials of crustaceans, and 54 vials of insects (166774); (through Dr. J. P. E. Morrison) 10 beetles collected in Long Cave, Kentucky, during August 1943 (165922).

NAVY DEPARTMENT, U. S., 14 specimens, U. S. Legion of Merit Decorations, each with button and ribbon to be worn in lieu of decoration (166910); (through Ensigns E. A. Behr and R. C. Smith) piece of wood containing 2 species of shipworms and 1 polychaete worm from Noumea, New Caledonia (166576); (through Lt. (jg) D. H. Johnson) 24 mammals, 4 birds, 8 reptiles and amphibians, and 1 crab from Florida and Georgia (166886).

Bureau of Ships: 1 wood sample of "carano" from Colombia (166172); 1 wood sample each of "essessang" from West Africa and of "wolar" from South America (167009); wood specimens of "araracanga," "tatajuba," and "piquia" from Brazil, and ironbark eucalyptus from Australia (167603).

Bureau of Yards and Docks: 1 small sample of "Madre Cerrna" wood from the Galápagos Islands (165640).

Coordinator of Research and Development: Special exhibit of emergency rescue equipment (167054, loan).

Naval Medical School: 17 rats and 2 mongooses (167120); 81 mammals, (rats and mice) from various sources (167284); 15 skins and 14 skulls of house rats from Washing-

ton, D. C., collected by O. A. Muennink (167337).

NEAVE, Dr. S. L., Kyuquot, Vancouver Island, British Columbia: Several parasitic worms (167669).

NEEDHAM, Dr. JAMES G., Ithaca, N. Y.: 16 Neotropical dragonflies, all determined (166518).

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 1,667 sheets of plants from India, collected by Dr. R. R. Stewart (165561, 165884, exchange); 37 plants from Colombia (166872, exchange); 296 plants from the Great Basin region (167028, exchange); 4 plants from Argentina (167678).

NEW YORK STATE COLLEGE OF AGRICULTURE, Ithaca, N. Y.: 22 plants (166744, exchange).

NEW YORK STATE MUSEUM, Albany, N. Y.: (Through Dr. Winifred Goldring) 2 Devonian brachiopods from Australia; 2 specimens of recent snail, from Alaska (166078).

NEW YORK ZOOLOGICAL SOCIETY, New York, N. Y.: (Through Dr. William Beebe) 28 frogs from Venezuela and British Guiana (166748).

NICÉFORO MARÍA, Brother, Bogotá, Colombia: 34 bird skins (166628); 51 bird skins from Colombia (166700).

NICHOLS, JOHN T., and Dr. SAMUEL F. HILDEBRAND. (See under American Museum of Natural History.)

NICHOLSON, DONALD J., Orlando, Fla.: 4 sets of eggs of gull-billed tern and 1 nest of Florida redwing (165825).

NICOL, DAVID, Stanford University, Calif.: 5 slides of Foraminifera (166855).

NICOLAY, ALAN S., Montclair, N. J.: 4 insects (166562, exchange).

NOFTSINGER, FRANK A., Roanoke, Va.: 28 pictorial photographs (165754, loan).

NORTH CAROLINA STATE MUSEUM, Raleigh, N. C.: 1 beaked whale fetus, collected at Cape Hatteras, N. C., in 1940 (162555).

OFFICE OF THE COORDINATOR OF INTER-AMERICAN AFFAIRS, *Division of Health and Sanitation*, Washington, D. C.: (Through Dr. Raymond M. Gilmore) A small collection of mammals, a bird, and a few snakes from Bolivia (166387).

OFFICE OF WAR INFORMATION, Washington, D. C.: 3 war posters (165851).

OLIVEIRA PINTO, DR. OLIVERIO M. DE, São Paulo, Brazil. (See under Departamento de Zoologica.)

OLMSTED, DR. A. J., Washington, D. C.: 1 pocket Kodak, 1896 model; 1 roll of film of 1908, and 1 leather case (166321).

OLMSTED, HARRY H., Arlington, Va.: 1 De Vry 16-mm. motion-picture camera (166157).

OLSEN, Prof. O. WILFORD, Angleton, Tex.: 150 mollusks from Texas (166202).

O'NEILL, Dr. HUGH T., Washington, D. C. (See under Father Dutilly.)

ORCUTT, Mrs. C. R., San Diego, Calif.: 324 lichens from Jamaica (112573).

OSBORN, BEN, Glen Rose, Tex.: 17 grasses mostly from Oklahoma and Kansas (165352).

OSBURN, Prof. RAYMOND C., Columbus, Ohio: 1 mollusk from Put-in-Bay, Ohio (167332).

OSMENT, Capt. WILLIAM, Hollywood, Fla.: 35 mollusks from Cuba (167118, 167403).

OSORIO, Dr. J. M., Habana, Cuba. (See under University of Habana.)

OUTES, Dr. JULIO D., Salta, Argentina: A collection of *Aeglea* from La Quiaca, Jujuy, Argentina (166119).

OWNBEY, Dr. MARION. (See under State College of Washington.)

PACKARD, RALPH G., Morristown, N. J.: Whitworth rifle made in 1878 (165685).

PADULA, FIORAVANTI, Rio de Janeiro, Brazil: Crystal of muscovite from Chalet Verde mine, Espera Feliz, Minas Gerais, Brazil (166967).

PARKE, DAVIS & Co., Detroit, Mich.: 5 official tinctures and 4 official fluidextracts, for pharmacy collection (167557).

PARKER, H. L., Montevideo, Uruguay: 1 bird skin, Paraguayan snipe (165220).

PARODI, Dr. LORENZO R., Buenos Aires, Argentina: 18 grasses, mostly from Argentina (167012); 12 grasses from Argentina (167209, exchange).

PARSONS, Dr. CHARLES L., Washington, D. C.: (Through Frank L. Hess) A specimen of gold in fluorite from Stratton's Independence mine, Cripple Creek, Colo. (166371).

PARTRIDGE, WILLIAM T., Washington, D. C.: A carpenter's plane, c. 1800, Athens, Ga. (165658).

PATCH, E. L., Co., Boston, Mass.: 1 specimen of cod-liver oil, for the collection of animal drugs (167556).

PATTERSON, Mrs. W. E., Washington, D. C.: (Through Library of Congess) A fragment of a Spanish flag taken from *Morro Castle*, Habana, Cuba, in 1898 (166201).

PAULY, KARL A., Schenectady, N. Y.: 5 thin sections of Onondaga chert with fossil remains, from Berne and New Salem, N. Y. (167216).

PEABODY ENGINEERING CORPORATION, New York, N. Y.: (Through E. H. Peabody) A combination oil and gas

burner for industrial use and a sectioned oil atomizer of the same (165584).

PEARSON, Dr. T. GILBERT (deceased): 1 bird head and 1 bird skin (166327).

PEEK & VELSOR, INC., New York, N. Y.: A specimen of the rhizome and roots of Gentiana, USP, for materia-medica collection (167710).

PEGGS, A. DEANS, Nassau, Bahamas, B. W. I.: 26 shrimps, 1 crab, 2 flies (165840).

PENICK & Co., S. B., New York, N. Y.: Specimens of horseradish root, rue, and nutmeg (165533, 167508).

PENNSYLVANIA, UNIVERSITY OF, Philadelphia, Pa.: (Through Dr. Edgar T. Wherry) Fern from Oklahoma (167712, exchange).

PEPSI-COLA Co., Long Island City, N. Y.: Calendars for 1942 and 1944 with reproductions of paintings by well-known American artists (166554).

PERKINS, JOHN U., Washington, D. C.: 19 reproductions in rotary photogravure of paintings by old masters, published by Charles Letts & Co. about 1906 (165765).

PERRY, Dr. STUART H., Adrian, Mich.: 2 meteorites; New Westville, Preble County, Ohio, weight 4.8 kilograms, and Edmonton, Ky., 10.2 kilograms (166494); 2 meteorites, Penokee, Kans., 3,580 grams, and Cavour, S. Dak., 4,310 grams (166516); 1 mass of the Linwood, Nebr., meteorite (167622).

PFEIFFER, Lt. E. W., Camp Lejeune, N. C.: 37 birds and 1 bat from eastern Brazil (167482).

PHALEN, Mrs. JAMES M., Washington, D. C.: Navaho blanket acquired at Fort Wingate, Ariz., about 1896 (167525).

PHELPS, W. H., Caracas, Venezuela: 2 specimens of a Venezuelan warbler, 1 type on deposit, 1 paratype gift to Museum (166699, gift and deposit).

PIERCE, ROBERT E.: (See under Florida Power & Light Co.)

PITTIER, Dr. H., Caracas, Venezuela: 3,279 plants from Venezuela (165699, 166068, 166475).

PLYMOUTH CORDAGE Co., North Plymouth, Mass.: A 350-foot coil of 3-ply nylon rope similar to that now being used by the U. S. Army Air Forces for towing gliders (167719, loan).

PORTER, Dr. C. L. (See under University of Wyoming.)

POST OFFICE DEPARTMENT, Washington, D. C.: 13 sets of specimen stamps (1,444 specimens) received from the International Bureau and described in bulletins of that bureau (165574, 165704, 165824, 166136, 166289, 166584, 166762, 167096, 167344); 12 specimens of 5-cent commemorative postage stamps of Czechoslovakia, Luxemburg, Norway, and Poland (165894); 3 postage stamps of Bahamas, Barbados, and Newfoundland, received from Postal Administration of Great Britain (165997); 15 commemorative postage stamps of Belgium, France, Greece, Netherlands, and Yugoslavia (166475); 11 postage stamps of Barbados, Poland, and U. S. S. R. received respectively from the Postal Administrations of Great Britain, Poland, and U. S. S. R. (166477); 9 stamps, 3 each commemorative of Albania, Austria, and Denmark (166983); 2 Millionaire calculating machines patented 1895 (167157); 19 postage stamps and cards of the U. S. S. R. received from the Postal Administration of the U. S. S. R. (167540, 167672).

POTZGER, Prof. J. E., Indianapolis, Ind.: 206 grasses from Indiana (166717).

PRATT, HARRY D. (See under Federal Security Agency, U. S. Public Health Service.)

PRATT, Mrs. LUCY HOLDER, Winston-Salem, N. C.: Homespun cotton counterpane handwoven in an overshot pattern, "double bowknot," by the donor's grandmother, Lucy Newsome Doub, in 1833, at Guilford Battle Ground, near Greensboro, N. C. (165485).

PRINCE, F. M. (See under Federal Security Agency, U. S. Public Health Service.)

PRINCETON UNIVERSITY, Princeton, N. J.: (Through Prof. B. F. Howell) 7 Middle Cambrian fossils from the Cloud Rapids formation of Newfoundland (165724).

RANSFORD, ARTHUR N., White Plains, N. Y.: 56 bird skins from Ecuador (167379).

RAPP, FLOYD A., Washington, D. C.: 1 specimen of bauxite, from Paranam, Dutch Guiana (167140).

RAPP, WILLIAM F., Jr., Chatham, N. J.: 10 plants from New Jersey (167227).

RASETTI, Dr. FRANCO, Quebec, Quebec: 46 Cambrian and early Ordovician brachiopods from the vicinity of Lévis, Quebec (166139).

RAYNOLDS, EDWARD F., Central Valley, N. Y.: 6 pictorial photographs; "A Quaker Maid," "Old Salt," "Natures Drama," "Hale & Hearty," "The Recluse," and "Mike" (165709).

RAYONIER INCORPORATED, New York, N. Y.: A series of specimens, illustrating the chemistry and applications of refined alpha-cellulose from wood pulp, together with a photo-

graphic background and various installation fixtures (167269).

REEDER, Sgt. JOHN R., San Francisco, Calif. (APO): 41 grasses from New Guinea (167031).

REES, Lt. B. E., Washington, D. C.: A small collection of mosquitoes, beetles, and 1 spider from Goodenough Island, near New Guinea, collected by the donor (165874).

REESIDE, Dr. JOHN B. (See under U. S. Department of the Interior, Geological Survey.)

REHDER, Lt. GERHARD, New York, N. Y. (APO): 7 lots, 18 specimens, of land and marine shells from North Africa (166740).

REID, EARL D. (See under Smithsonian Institution, National Museum.)

REINHARD, Prof. E. G., Washington, D. C.: 11 crustaceans (166565).

REINHARD, H. J. (See under Texas Agricultural Experiment Station.)

REMINGTON, E. F., Perry Point, Md.: (Through Dr. W. M. Mann) Chipped stone artifacts from the Army Hospital Grounds at Perry Point, Cecil County, Md. (165735); chipped stone artifacts gathered on the Army Hospital Grounds, Perry Point (167608).

REPUBLIC MINING & MANUFACTURING Co., New York, N. Y.: (Through Lawrence Litchfield, Jr.) 8 specimens of French bauxite (167335).

REYNOLDS, ROBERT V. R., Washington, D. C.: A surveying compass with transit attachment and tripod, c. 1870, made by W. and L. E. Gurley (165452).

RHOADES, Dr. RENDELL, Put-in-Bay, Ohio: 25 type specimens of crayfish (166768).

RHOADES, WM., Indianapolis, Ind.: 2 insects (165412).

RHODE ISLAND DEPARTMENT OF AGRICULTURE AND CONSERVATION, Kingston, R. I.: (Through C. C. Jennings) 2 harvest mites (165823).

RICE INSTITUTE, Houston, Tex.: (Through Dr. Asa C. Chandler) 1 termite (165508); 1 katydid (165509).

RICHARDS, Dr. HORACE G., Philadelphia, Pa.: 3 specimens of a bryozoan from the Pleistocene of New Jersey (166470); 100+ amphipods and 1 hydroid (166788).

RICHMOND, Sgt. MARION, Arlington, Va.: 1 albino mole (165667).

RICKER, Dr. P. L., Washington, D. C.: Specimen of plant from Maryland (167560).

RIGGS, WILLIAM A., Little Rock, Ark.: 5 specimens of cinnabar from Arkansas (165763).

RIGUEY, CARL CECIL, Stillwater, Okla.: (Through Prof. R. Chester Hughes) 9 slides of cotype specimens of a cestode (165787).

RINEY, Pvt. THANE A., Proving Ground, Ill.: 1 hermit crab (166348).

RIPLEY, H. ERNESTINE, Scarsdale, N. Y.: 1 fossil crab from Fayum Desert, Egypt, collected by Walter Granger, 1907 (167630).

RITCHER, Dr. PAUL O., Lexington, Ky.: 14 beetle larvae and larval skins representing 6 species (166273); 17 beetles (167139).

RIVAS, LUIS R. (See under Reverend Brother Leon.)

ROBERTS, Lt. H. R.,: (See under War Department, Army Medical Center).

ROBERTS, Lt. (jg) JOHN P., Rapid City, S. Dak.: 1 Groesbeck's calculating machine, patented March 18, 1870, marked Ziegler & McCurdy (167256).

ROBINSON, W. O., Falls Church, Va.: 1 beryl crystal from Acworth, N. H. (166080).

ROEBLING, FUND, Smithsonian Institution, Washington, D. C.: 4 yellow, brown, blue, and green zircons, 1 brown olivine, 1 morganite, 1 sphalerite, 1 chrysoberyl, and 1 salmon-colored beryl (165613); a series of zircons, spinels, a sapphire, and a Mexican opal (165828); 8 scheelite crystals from Kernville, Kern County, Calif. (166360); a cut stone of scheelite weighing 18.7 carats from Kernville, Calif. (166487); a green beryl, a yellow garnet, and a blue spinel (166801); a 4-rayed star garnet from Emerald Lake, Idaho, weight 6.79 carats (166956); 4 quartz crystals from Sugar Loaf No. 1 claim, Dona Ana County, N. Mex. (166996); specimen of Cavour, S. Dak., meteorite (167011); 1 chrysoberyl from Brazil, 13.80 carats (167270, part gift, part exchange); 1 star spinel from Ceylon and 4 tourmalines from Brazil (167317); 1 emerald cat's-eye from Colombia, weight 4.55 carats (167394);

ROLLER, JANE, Takoma Park, D. C.: 1 cowbird (167830).

ROLLINS, EDGAR J., West Somerville, Mass.: 19th-century American flat-iron of the inventive period (167255).

ROOSEVELT, President FRANKLIN DELANO, Washington, D. C.: (Through Ralph E. Cropley) Ship's bulkhead lantern of R. M. S. *Mauretania*, brass with 3 beveled plate-glass windows (166146); 4 mounted fishes transferred from the waiting room at the White House (166533).

ROSENGURTT, Dr. BERNARDO, Monzon-Heber, Uruguay: 67 plants from Uruguay (165607, 166476); 143 plants from Uruguay and Argentina (166607,

167032, 167247, 167381, 167717, exchange).

ROSENWALD, MAURICE, New York, N. Y.: Copy of "The Hatchet"—collection of newspapers issued on board the U. S. S. *George Washington* during World War I (167097).

ROSS, Lt. EDWARD S., Santa Barbara, Calif.: 5 insects, 4 holotypes and 1 allotype (166471).

ROSS, Dr. H. H., Urbana, Ill.: (See under Tennessee Valley Authority.)

ROYAL ONTARIO MUSEUM OF PALEONTOLOGY, Toronto, Ontario: (Through Dr. Madeleine A. Fritz) Fragments of holotype of bryozoan (167130).

RUBBER DEVELOPMENT CORPORATION, Washington, D. C.: 2 trunk sections of highland chilte trees from Mexico (165530).

RUBEY, W. W. (See under U. S. Department of the Interior, Geological Survey.)

RUBIN, CHARLES, Washington, D. C.: A pair of pocket scissors combining 18 different tools, imported from Germany in 1921 (166703).

RUNYON, ROBERT, Brownsville, Tex.: 2 plants and fruit and seeds from another from Texas (166673, 166608).

RYNEARSON, GARN A., Grants Pass, Oreg.: A specimen of uvarovite from Blue Point claim, Tuolumne County, Calif. (166043).

ST. JOHN, Dr. EDWARD P., Potsdam, N. Y.: 5 plants from New York (165562, 165803, exchange)

SALTER, WILLIAM E., Washington, D. C.: A partial skeleton of an extinct sea-cow from the Calvert formation of Maryland (165846); 46 fresh-water mollusks collected at Marshall Hall, Md. (167694).

SAMPSON, A. H., Holyoke, Mass. (See under White & Wyckoff Manufacturing Co.)

SANBORN, Lt. COLIN C., Washington, D. C.: 1 fish from the Pacific Ocean off Point Parimas, Peru (167132).

SÁNCHEZ, JOSÉ, Sadi-Carnot, Mexico: 47 plants from Mexico (167343).

SANDERS, BILL, Purdy, Mo.: 1 albino downy woodpecker (166509).

SARGENT, F. H., Washington, D. C.: 267 plants from Puerto Rico (166406, 166948).

SAWAYA, Dr. PAULO, São Paulo, Brazil: 42 specimens of *Aeglea* (166719).

SAWYER, PHILIP A., St. Augustine, Fla.: 1 block model of a shrimp boat, 1 block model of a sponge boat, and 1 rigged model of a sponge boat, Tarpon Springs, Fla. (165514).

SCATTERGOOD, LESLIE W., Boothbay Harbor, Maine: 2 shrimps from Maine (167258).

SCHEFFER, Dr. VICTOR B. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

SCHMITT, Lt. KARL, Phoenix, Ariz.: 65 archeological specimens from sand-dune hearth areas in Utah (167645).

SCHMITT, Dr. WALDO L., Washington, D. C.: 1 mollusk from Uruguay (165526).

SCHULTZ, JIMMY, Washington, D. C.: 1 fossil crab claw from the Miocene at Plumpoint, Chesapeake Bay, Md. (166485).

SCHULTZ, Dr. LEONARD P. (See under Mrs. S. Karrer and Smithsonian Institution, National Museum.)

SCHWARTZ, L. M., Washington, D. C.: Plant from Washington, D. C. (165887.)

SCHWARTZBACH, Dr. SAUL, Washington, D. C.: 760 specimens of fossil shells from Galápagos Islands (166141).

SCHWARZ, Dr. ERNST. (See under Lt. Comdr. J. M. Amberson.)

SCHWINFURTH, CHARLES. (See under Harvard University, Botanical Museum.)

SELBY, Dr. JOHN HUNTER, Alexandria, Va.: 5 specimens of historical X-ray apparatus (166701); 1 localizer, 1 Benoist penetrometer, 1 radiograph, and 1 pair of glass doorknobs for X-ray collection (166784); specimen of Lovibond's tintometer (perfected by Dr. Dudley Corbett) for the X-ray collection (167626).

SELF, Prof. J. TEAGUE, Norman, Okla.: 38 specimens of mollusks from the Tennessee River (166621).

SENN, Dr. ALFRED, Barbados, B. W. I.: Foraminifera and corals from the middle and old Eocene of Barbados (77 localities represented and 21 species of Foraminifera and 26 corals included); also Foraminifera and corals from the Oligocene and Miocene of Martinique (165721).

SERMET, Mrs. E., Washington, D. C.: 1 beetle collected at Palm Beach, Fla. (166065).

SEYBOLD, G. H., Harbel, Liberia: 1 flat skin of an African antelope (166771).

SHAFER, MINNIE M., Washington, D. C.: The saddlebags used by Dr. George M. Shafer, U. S. Army, in private practice in Ohio (166472).

SHAMEL, H. HAROLD, Washington, D. C.: Skin and skull of 1 cottontail rabbit from Maryland (167349).

SHAPIRO, Dr. HARRY H., New York, N. Y.: (Through Mrs. Jerome Myers) 3 prints by Jerome Myers, "Self-Portrait," etching; "Self-Portrait," lithograph; and "First Avenue Park," etching printed in color (166279).

SHARP, Prof. AARON J. (See under University of Tennessee.)

SHARP & DOHME, INC., Philadelphia, Pa.: An exhibit illustrating the manufacture and use of dried blood plasma (165849).

SHEARMAN, THOMAS G., Washington, D. C.: Kris-dagger and sheath from Malaysia collected before 1885 (165861).

SHELDON-CLAIRE Co., Chicago, Ill.: 31 war posters entitled "This is America" (167134).

SHELFORD, Dr. V. E., Champaign, Ill.: 17 isopods and 29 amphipods (165422).

SIDDALL, ALICE I., Washington, D. C.: B-flat rosewood clarinet with silver mountings made in the 70's by C. H. Eisenbrant, of Baltimore (167472).

SILBERSTEIN, Mrs. H., Greenbelt, Md.: 4 mollusks from Guam (165621).

SIMOES, JOSÉ FERRAZ, Rio de Janeiro, Brazil: 1 specimen of polycrase with its alteration product and 1 crystal of a pseudomorph possibly of columbite or tantalite from Municipio of Juiz de Fora at Fazenda Boa Vista, about 2½ km. northwest of Vargin Grande, Minas Gerais, Brazil (166966).

SKINNER, WILLIAM, & SONS, New York, N. Y.: An aviator's suit of heavy rayon satin: "Tackle Twill," a duplicate of one worn by Lt. Col. Wm. A. Lovelace, Air Force Surgeon, when he made a parachute jump from a Flying Fortress at an altitude of 40,200 feet, near Euphrata, Wash., in 1943, dull side out; quilted with a filling of down and processed chicken feathers (166583); 2 suit fabrics of rayon-faced cotton-backed twill and rayon-faced wool-backed double-weave serge (interlining) to be used with G. E. Army Air Force electrically heated F-2 and F-3 flying ensembles and an enlarged colored photograph of an Army bomber (167341).

SLAVIN, MAURICE, Washington, D. C.: A zircon, 3 crystals of tantalite, and a specimen of tapiolite from Paraika, Brazil, and 1 specimen of simpsonite from Solidada, Brazil (167765).

SMITH, CHARLES F., Kingston, Pa.: 9 fossil-animal trails from the Chemung shale near Lanesboro, Susquehanna County, Pa. (167136, exchange).

SMITH, C. N., Bulls Island, S. C.: Young house rat from Bulls Island (167350).

SMITH, Dr. CHARLES PIPER, San Jose, Calif.: Photographs of 2 plants (166811, exchange).

SMITH, Mrs. FRANK C., Worcester, Mass.: Fern from Massachusetts (166492).

SMITH, Dr. LYMAN B. (See under Harvard University, Gray Herbarium.)

SMITH, G. STACE, Quebec, Quebec: 2 paratype specimens of beetles (167142).

SMITH, MAXWELL, Winter Park, Fla.: 1 mollusk from Panama Bay (167393).

SMITH, Ensign R. C. (See under Navy Department.)

SMITHE, GENEVA, Ann Arbor, Mich.: A collection of 15 pieces of American and European handmade laces (165551).

SMITHSONIAN INSTITUTION, Washington, D. C.: Photographs of the Russian scientist Klimenty Arkadevich Timiryazev (1843–1920) and of his wife, his residences, and various books and documents connected with his career (166152, deposit); 1 Lauers patent revolving photograph cabinet, about 1870 (166486, deposit); 1 18″ x 22″ albumen print from a wet plate, an original W. H. Jackson, "Grand Canyon of the Yellowstone" (166553, deposit); 42 plants from Colombia (166894, deposit); 1 30″ x 30″ Benster plate holder used by solar eclipse expedition at Wadesboro, N. C., in 1900 (167183, deposit); 1 etching, "Stony Pasture," by Luigi Lucioni, the annual associate member's print of the Society of American Etchers (167185, deposit); 2 pairs of wrought-iron hinges and a bar handle strip from original entrance doors to Children's Room, Smithsonian Building (167321, deposit).

Bureau of American Ethnology: 3 old photographic lenses (167563).

National Collection of Fine Arts: 1 portrait of John William Draper; a fine engraving by John Sartain (166773).

National Museum, collected by members of the staff: Chapin, Dr. Edward A.: 70 insects and 90 fresh-water mollusks taken in Springfield, Mass., in July 1943 (165542); Cooper, Dr. G. Arthur: A collection of Cambrian, Devonian, Mississippian, and Permian fossils from Sonora, Mexico (165785); 500 Middle Ordovician fossils, including unusual crinoids and cystids from eastern Tennessee and southwestern Virginia (166370); Killip, E. P.: 2,052 plants from Venezuela (165605); Schultz, Dr. Leonard P., and Earl D. Reid (with Ensigns John H. and Frank C. Craighead, Jr.): 658 fishes from Patuxent River, Md. (165595); Wetmore, Dr. A., 11 birds, 1 chipmunk, and 1 mollusk from Shenandoah National Park (166182).

National Museum, made in Museum laboratories: A miniature model of a primitive oil refinery of William Barnsdal and W. H. Abbott built on the Parker Farm at Oil Creek, Pa., in 1860 (165692); cast of the type of a new comatulid and 2 casts of a crustacean from the Cretaceous of the Department of Cundinamarca, Colombia (167232); an album of 95 prints showing the building of the schooner *Blackfish* c. 1938; negatives lent by Mr. John M. Clayton (167397).

National Zoological Park: 9 bird skins, 68 bird skeletons, and 3 alcoholics (165783, 167380); 20 mammals (166016, 167709), 1 fish from West Africa (166651), 7 reptiles and amphibians (167768).

SOICE, REX, Chicago, Ill.: 1 Agfa color plate of 1924 and a reproduction therefrom (167263).

SOLAR, Dr. ENRIQUE DEL, Lima, Peru: (Through Dr. Ramon Ferreyra) 4 shrimps (165549).

SORENSEN, A., Pacific Grove, Calif.: 7 lots of barnacles (165407).

SOUKUP, Dr. J., S. S., Lima, Peru: 261 plants from Peru (165559, 166170, 167466).

SOUTHERN RAILWAY SYSTEM, Washington, D. C.: Collection of copper, chromium, manganese, and miscellaneous ores from southeastern United States (166861).

SOUTHWORTH, CHARLES, Thedford, Ontario: 1 Devonian clam (165746); 500 Middle Devonian brachiopods and 1 pelecypod from Ontario (166581).

SOXMAN, G. M., Dallas, Tex.: 9 ferns from Texas (164886).

SPEROS, JOHN, Washington, D. C.: An old silver watch having 3 dials and marked "Ancre 13 Pierres Rubis Houriet N 93257" (167262).

SPICER, Dr. V. D. P., San Francisco, Calif.: 325 specimens (including type of 1 new species) of marine shells from Midway, French Frigate Shoals in the Hawaiian group and Christmas Island in the Line Islands (167248). (See also under Glen L. Hall and S. L. Kimball.)

SPRINGER, STEWART, Homestead, Fla.: 35 fishes (160974).

SQUIBB & SONS, E. R., New York, N. Y.: Material to illustrate the manufacture of penicillin (166017).

STADNICHENKO, MARIA, Washington, D. C.: 33 slides and 1 vial of fossil larger Foraminifera from the Eocene of northwestern Peru (167552).

STALLINGS, DON B., Caldwell, Kans.: 12 butterflies, representing 6 species, all types (166623).

STANFORD UNIVERSITY, Stanford University, Calif.: 1 cultivated fern (165604, exchange); 20 specimens, paratypes of 11 species, of marine mollusks from the Miocene of California, described by Dr. Myra Keen (166180, exchange).

STAR FUSE CO., New York, N. Y.: 1 cellulose acetate test plier (167424).

STEARNS, J. L.. (See under U. S. Department of Agriculture.)

STEERE, Dr. WILLIAM C., Washington, D. C.: 1 plant (166997).

STEINMETZ, Dr. F. H. (See under University of Maine.)

STEPHENSON, Dr. L. W., Washington, D. C.: 11 chert artifacts and rejects of Edwards limestone (Lower Cretaceous; exposed in Edwards Plateau) from Comal and Guadalupe Counties, Tex., collected by Dr. Stephenson on October 18, 1911 (166183).

STEVENS & CO., J. P., New York, N. Y.: 7 examples of plain, twill, crepe, and fancy weaves made of blended yarns in various combinations of viscose and acetate rayons with aralac (made from casein) and wool produced in South Carolina mills (165974).

STEVENSON, FRANK V., Chicago, Ill.: 5 Devonian brachiopods from southern New Mexico (166942).

STEWART, Col. HARRY, Cuernavaca, Morelos: 158 ethnological specimens and 1 lot of 23 photographs collected by Edwin F. Myers in 1938 during a 3 months' sojourn among the Huichol Indians in northern Jalisco, Mexico (164789).

STIRLING, M. W., Washington, D. C.: Fishes, snake, frogs, 2 lizards, leech, crab, and 2 insects collected on the Upper Río de las Playas, Mexico (167774).

STOKEY, Dr. ALMA G., South Hadley, Mass.: 4 ferns (104243).

STONE, ERNEST C., Helena, Mont.: 6 mollusks from near Dillon, Mont. (165599).

STOTTLEMEYER, MARGARET A. R., Washington, D. C.: Single weave, jacquard type coverlet, "lilies and stars," bearing woven name and place "Andrew Corick Middletown, Frederick County, Maryland," in lower corners; and a cotton quilt, appliqued in conventional rose pattern, made by the donor's sister (167647).

STUMM, Dr. ERWIN C., Oberlin, Ohio: 65 invertebrate fossils from the Devonian (Detroit River formation) of north-central Ohio (166758).

STUNTZ, Lt. STEPHEN C., Jr., San Francisco, Calif. (APO): 2 butterflies from New Guinea, both new to the Museum's collection (166633).

SUSAN B. ANTHONY LEAGUE FOUNDATION, Washington, D. C.: (Through Mrs. Ada van Loon Brandow MacGee) Silk banner, plaster plaque, and framed silhouette associated with the history of woman's suffrage in the United States (164793).

SWANTON, Dr. JOHN R., Washington, D. C.: Archeological material, chiefly potsherds, from various Indian sites in southeastern United States, including certain lots from sites on or near the presumed route of De Soto's expedition of 1539–42, and provisionally identified with towns mentioned by the Spaniards (165802); stone elbow pipe with cherry wood stem made by the Natchez Indian Watt Sam in 1915 and presented by him to Dr. Swanton (167837, loan).

SWIFT, DOROTHY R., Washington, D. C. (See under John V. Morris.)

SWINGLE, Dr. W. T., Washington, D. C.: 43 mosses from Kansas (166957).

TAFT, CHARLES P. (See under Mrs. William Howard Taft.)

TAFT, Mrs. WILLIAM HOWARD, Washington, D. C.: (Through Charles P. Taft) A collection of 17 Javanese, Moro, and other oriental brasses; also 1 inscribed silver vase bearing the hallmark of Chester, England (165833).

TANNER, Dr. VASCO M., Provo, Utah. (See under Brigham Young University.)

TARZWELL, Dr. CLARENCE M. (See under Tennessee Valley Authority.)

TAYLOR, Dr. R. M. (See under Ministerio da Educação e Saude.)

TEETERS, ROBERT, Melrose Park, Pa.: An incomplete skeleton of white-tailed jack rabbit (165844).

TENNESSEE, UNIVERSITY OF, Knoxville, Tenn: (Through Prof. Aaron J. Sharp) 49 specimens of grasses (165774, exchange); 152 plants from Virginia, South Carolina, and Tennessee (166156, exchange).

TENNESSEE VALLEY AUTHORITY, Decatur, Ala,: (Through Dr. Clarence M. Tarzwell) 69 turtles and 1 salamander from Wheeler Reservoir (166663): (through Dr. A. D. Hess) 2+ jellyfishes (166722); (through Dr. H. H. Ross) 19 vials of aquatic insects collected by Dr. J. S. Dendy (165999).

TEXAS AGRICULTURAL EXPERIMENT STATION, College Station, Tex.: (Through H. J. Reinhard) Small collection of miscellaneous insects collected in Australia by C. J. Burgin (167085).

TEXAS MEMORIAL MUSEUM, Austin, Tex.: One slice, 142 grams, of the San José, Tamaulipas, Mexico, meteorite (166848).

TEXAS STATE BOARD OF HEALTH, Austin, Tex.: (Through Dr. S. W. Bohls) 60 insects, representing 6 species (166600, exchange), 4 slides of insect specimens (166943).

TEXAS, UNIVERSITY OF, Austin, Tex.: 54 plants, mostly from Texas (165501, exchange); 460 plants from Mexico (167351, exchange); 1,137 plants, mostly from Texas (167116, exchange); (through Dr. Fred A. Barkley) 40 plants from Texas (167043, exchange), 54 plants collected in the Chisos Mountains of Texas by C. H. Muller; 63 plants, mostly from Texas (167184, part gift and part exchange); 32 grasses from Texas (167207).

TEXTILE COLOR CARD ASSOCIATION OF THE UNITED STATES, New York, N.Y.: Standard Color Card, 9th edition (revised 1941), containing dyed swatches of crepe-back satin for matching to fabrics having either shiny or dull surfaces (167646).

THOM, Mrs. CORCORAN, Washington, D. C.: 3 pieces of pottery "excavated at Copan, Honduras" (167535).

THOMAS, Dr. B. O. A., New York, N. Y.: 1 Currier and Ives lithograph, "The Holy Sepulchre" (165536).

THOMAS, Dr. LYELL J. (See under Illinois State Academy of Science.)

THOMSON, JOHN P., Colville, Wash.: 6 Carboniferous fossils, brachiopods, and crinoidal debris, from northeastern Washington (166484).

TIDD, Dr. WILBUR M., Columbus, Ohio: 4 parasitic copepods (166379).

TILLER, RICHARD E., College Park, Md.: 1 fish taken in a pond net at Cedar Point Hollow, Chesapeake Bay (165635).

TISSOT, Dr. A. N. (See under Agricultural Experiment Stations, Gainesville, Fla.)

TITTLE, WALTER, Danbury, Conn.: 42 drypoints and 1 etching, from which 35 drypoints were selected for special exhibition, October 25 to November 28, 1943 (166245, loan); 18 drypoints and 1 etching by Walter Tittle (167135).

TOLMAN, R. P., Washington, D. C.: 1 embossed folder containing 8 reproductions of etchings, these made by deep etched offset lithography, combined with die-stamping, and originally issued by Nature Magazine (166404).

TOMLINSON, W. HAROLD, Springfield, Pa.: 1 specimen each of marialite, stilbite, natrolite, and chabazite from Perkiomenville, Pa. (165632, exchange).

TOWNSEND, Dr. C. H. T., São Paulo, Brazil: (Through Capt. David G. Hall) 1,844 flies, mostly from Brazil (166056).

TRAPIDO, Lt. HAROLD, Camp Davis, N. C.: 24 tree frogs and toads from Washington (167004).

TREASURY DEPARTMENT, *Bureau of the Mint*, Washington, D. C.: 30 specimens of U. S. coins dated 1943 (167141); 9 United States gold coins struck during the period 1854–1907 (167826).

TROPICAL FOREST EXPERIMENT STATION, Río Piedras, Puerto Rico: 3 plants cultivated in Puerto Rico (167225).

TRUITT, Dr. R. V., College Park, Md.: 40 isopods from Louisiana (167429).

TUCKER, Mrs. ARLOWEIN W. (See under Mrs. Elizabeth Kennett Wray.)

TURVER, Mrs. H. R., Santa Cruz, Calif.: 12 mollusks from Scotts Creek Beach, Santa Cruz County, Calif. (166693); 6 mollusks from Mexico and California (167512).

TUTHILL, Dr. L. D., Ames, Iowa: 15 insects representing 9 species, all paratypes (166638).

TWITCHELL, KARL S., New York, N. Y.: Fragment of Hamyarite bronze plaque and alabaster carving and 16 potsherds from near the ancient Hamyarite site of That-el Okt-el Hodood, Nejran, Asir, Saudi Arabia (165557, loan).

UDERITZ, GEORGE W., Vienna, Va.: One sample each of Guineawood, plain-sawed teak, and quarter-sawed teak (165622).

UNION DIESEL ENGINE CO., Oakland, Calif.: (Through O. H. Fischer) Model of an open crosshead cylinder developed by the Union Gas Engine Co. of Oakland, Calif., for large distillate and gasoline engines of about 1915 (166083).

UNITED SERVICE ORGANIZATIONS, Washington, D. C.: Third Anniversary Exhibit, January 20–January 31, 1944, comprising arts and crafts of service people made in the various U. S. O. centers (166772, loan).

UNIVERSAL WINDING CO., Providence, R. I.: 14 specimens of wire coils illustrating various products of Universal automatic coil winding machines (167169).

UNIVERSITY OF MONTREAL, Montreal, Quebec: 55 plants from Cuba (166231, exchange).

URDANG, Dr. GEORGE, Madison, Wis.: 37 prints pertaining to the life history of Carl Wilhelm Scheele, apothecary chemist (165747).

URIBE, Dr. LORENZO URIBE, S. J., Bogotá, Colombia: 12 plants from Colombia (165807, 165841).

USINGER, Dr. R. L., Davis, Calif.: 1 specimen (slide) of a bug (165554); 1 beetle larva, collected in a termite gallery beneath the bark of a pine stump at Rincon, Ga., May 30, 1943 (165556).

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah: (Through Dr. George F. Knowlton) 2 beetles, paratypes (167084); (through Dr. Arthur H. Holmgren) 4 plants from Nevada (166350, exchange).

VAIDEN, M. G., Rosedale, Miss.: 2 nests of indigo bunting (165660).

VALDÉS, FERNÁNDO ARAYA. (See under Mr. Coope.)

VALENCIA, Dr. JUAN IGNACIO, Bloomington, Ind.: 20 grasses from Chile and Argentina (167246).

VALENTINE, Dr. J. M., Washington, D. C.: 22 beetles, including 10 paratypes (166111).

VAN DEUSEN, Col. E. S., Detroit, Mich. (See under War Department.)

VARGAS C., Dr. C., Cuzco, Peru: 11 plants and 18 beetles from Peru (167057, 167106, 167674).

VARGAS, Dr. LUIS, Mexico, D. F.: 1 mosquito larva (167415, exchange).

VAUGHAN, Dr. T. WAYLAND. (See under Alabama Geological Survey, R. Wright Barker, and Dr. H. G. Kugler.)

VICTORIA PROVINCIAL MUSEUM, Victoria, British Columbia: 3 leeches, 8 flatworms, 3 bryozoans, and 7 amphipods (166266).

VINES, ROBERT A., Houston, Tex.: 25 plants from Texas (165926).

VIRGINIA FISHERIES LABORATORY, Williamsburg, Va.: 5 crabs (166012).

VISEL, GLADYS O., Washington, D. C.: Specimen of cultivated shrub (167593)

VLADYKOV, Dr. VADIM D., Montreal, Quebec: 3 cephalopods (156738).

VOGEL, MORTON, Washington, D. C.: 3 insects—1 fly, 2 Hymenoptera (165567).

VOKS—U. S. S. R. SOCIETY FOR CULTURAL RELATIONS WITH FOREIGN COUNTRIES, Moscow, U. S. S. R.: 6 war posters produced by hand stencil process (167088).

WADSWORTH, ROSE, Hallowell, Maine: Small collection of dragonflies made by the late Mattie Wadsworth of Manchester, Maine (166787).

WAGNER, Dr. H. O., Mexico, D. F.: 3 bird s eggs (167245).

WAGNER, Ensign WARREN H., Washington, D. C.: 115 ferns from West Virginia, Cuba, Puerto Rico, Trinidad, British Guiana, and Venezuela (165560, 165976, 166200, 166644, 167002, 167568); 53 butterflies, representing 23 species (167250).

WALFORD, Dr. LIONEL A. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

WALKER, CLARA R., Wellesley Hills, Mass.: 2 hand-woven, jacquard type coverlets; a blue-and-white, single and double weave combination in

"Medallions" pattern; and a red-and-white, double-weave "Tyler Coverlet" having the weaver's mark, an American eagle, and a name, place, and date woven in two corners, indicating it was made in Oswego County, N. Y., in 1845, for Cynthia Walker, the donor's paternal grandmother (166318).

WALKER, Dr. E. H., Washington, D. C.: 6 plants from the eastern United States (165710); 5 plants (167561). (See also under Maryland Academy of Sciences.)

WALKER, ERNEST P., Washington, D. C.: 10 hamsters raised in captivity by donor (166014, 166574).

WALKER, ROBERT SPARKS, Chattanooga, Tenn.: 6 amphipods (166356).

WALKLEY, LUELLA, Chevy Chase, Md.: 1 beetle collected by donor in Washington, D. C., July 17, 1943 (165707).

WALLACE, Hon. HENRY A., Washington, D. C.: 2 robes made from small strips of vicuña skin, presented to Vice President Wallace on the occasion of his good-will tour to South America in May 1943, by Miss Rosa Prado, daughter of the President of Peru (165809); 2 gold models, each on its silver base, presented to Vice President Wallace by the Chamber of Commerce in Bolivia on the occasion of his visit to La Paz in April 1943; both models reflect the Tiahuanaco style (165872).

WALTER RATHBONE BACON TRAVELING SCHOLARSHIP, Smithsonian Institution: 2,331 mammals, 29 fishes, 1 parasitic worm, 61 reptiles, a collection of insects, and 30 archeological and human skeletal specimens collected in the States of Magdalena, Bolívar, and Atlantico, Colombia, by Philip Hershkovitz, Bacon Scholar 1941–43 (161484, 166374).

WAR DEPARTMENT: 54 adult mosquitoes from New Guinea and Australia (165495); Army Nurse and Women's Auxiliary Army Corps coats and uniforms of the period of World War II (149 specimens) (166142, 167648).

Adjutant General's Office, Washington, D. C.: 5 medals of award, each with ribbon bar and lapel button, viz, U. S. Air Medal, and Legion of Merit, Chief Commander, Commander, Legionnaire, and Officer (167318).

Army Medical Center, Washington, D. C.: (Through Lt. H. R. Roberts) 270 adults and 95 larvae of mosquitoes collected in the Australasian region (165493).

Army Medical Museum, Washington, D. C.: (Through Maj. H. A. Davis) 16 snakes sent from General Hospital No. 20, India (166367); 3 snakes and 1 eel collected by Lt. C. G. Eddy, General Hospital No. 20, India (166560); 1 snake from New Guinea received from Lt. Col. Anselm W. Keefe (166846).

Army Medical School, Washington, D. C.: (Through Capt. Luther S. West) 30 mosquitoes (166518).

Division of Preventative Medicine, Washington, D. C.: (Through Major Kirk J. Moseley) 9 mosquitoes (3 adults, 6 larvae) (165494).

Fourth Service Command Medical Laboratory, Fort McPherson, Ga.: (Through Maj. Stanley J. Carpenter) 73 larval slides and 30 vials of mosquito larvae in 40 species from the southeastern United States (167828).

Office of Chief of Ordnance, Washington, D. C.: (Through Col. E. S. Van Deusen) 1 Army ¼-ton 4 x 4 truck ("jeep") (167398).

Office of the Quartermaster General, Army Service Forces, Washington, D. C.: 34 pieces of captured German and Japanese military equipment (167554, loan).

WAR PRODUCTION BOARD, *Lumber and Lumber Products Division*, Washington, D. C.: Samples of 12 commercial woods of Cuba (165623).

WAR SHIPPING ADMINISTRATION, Washington, D. C.: U. S. Merchant Marine Distinguished Service Medal, Mariner's Medal, and Merchant Marine Emblem, each with service bar and certification card (167235).

WARREN, WALTER C., Black Diamond, Wash.: 1 lot of boehmite-bearing clay from Washington (167767).

WASHINGTON LOAN & TRUST CO., Washington, D. C. (See under Kate Session Marsh.)

WASHINGTON, STATE COLLEGE OF, *Department of Botany*, Pullman, Wash.: (Through Dr. Marion Ownbey) 95 plants from Canada (166067, exchange); (through William A. Weber) 294 plants from the western United States (166531, exchange).

WATSON, CHARLES, Washington, D. C.: 1 bat (165801).

WATSON, MRS. HARRY L., Washington, D. C.: 1 swift, umbrella type, of hard wood, believed to have come from a farm home at Easton, Mass. (166319).

WEAVER, JOHN, Elk Springs, Colo.: One specimen of gilsonite from White River, Moffat County, Colorado (166931).

WEBER, WILLIAM A. (See under State College of Washington.)

WELLS, Dr. JOHN W., Columbus, Ohio: 76 fossil and recent corals collected by

Dr. Hollis Hedberg, embracing 14 holotypes, 12 paratypes, 27 figured specimens, and other specimens (165723); holotype of coral from the Middle Cretaceous Buda limestone of Texas (166317).

WEST, Capt. LUTHER S., Washington, D. C. (See under War Department, Army Medical School.)

WETMORE, Dr. A., Washington, D. C.: 1 white-throated sparrow (166275); 1 jumping mouse collected in Fairfax County, Va., October 17, 1943 (166578). (See also under Smithsonian Institution, National Museum.)

WHEELER, H. E. (See under Arkansas Geological Survey.)

WHERRY, Dr. EDGAR T., Philadelphia, Pa.: Fern from Pennsylvania (165886). (See also under University of Pennsylvania.)

WHITE, BURDETTE E., Merced, Calif.: 4 beetles (167159); 2 beetles, male and female paratypes (167205).

WHITE, Dr. O. E., Charlottesville, Va.: 4 plants from Brazil (165697).

WHITE & WYCKOFF MANUFACTURING Co., Holyoke, Mass.: (Through A. H. Sampson) Copies of calendars issued for the years 1932, 1934, 1935, 1936, 1937, 1940, 1943, and 1944, with illustrations of artistic and historic interest (167191).

WILLIAMS, Sgt. MILO W., Sarasota, Fla.: A large collection of marine invertebrates, fishes, mollusks, and echinoderms (166430, 166646).

WILLIAMSON, Lt. WALTER, Washington, D. C.: 9 mollusks from Brazil (167045).

WORK PROJECTS ADMINISTRATION, Washington, D. C.: (Through A. T. Hill) Pottery sherd samples from various Indian village sites in Nebraska and South Dakota; excavated by W. P. A. and Nebraska State Historical Society (166141).

WRAY, Mrs. ELIZABETH KENNETT (deceased): (Through Mrs Arloweine W. Tucker) Mounted hair-work "Memorial Wreath," period of 1878, made at the Montgomery Female College, Christiansburg, Montgomery County, Va., by the donor's mother, Mollis J. Meedor, when she was 14 years old (167396).

WRIGHT, EDITH A., and JOSEPHINE MCDEVITT, Washington, D. C.: 39 early American military prints on sheet music, for exhibition August 2 to 29, 1943 (165756, loan).

WRIGHT, L. M., C. E. M., New York, N. Y. (F. P. O.): 1 mollusk (165703).

WRIGHT, M. L., Carlsbad, N. Mex.: 9 smoky quartz crystals from the Capitan Mountains near Lincoln, N. Mex. (166081).

WRIGHT, M. L. Miami, Fla.: 15 marine shells from Florida (167254).

WRIGHT, Dr. W. H. (See under Federal Security Agency, U. S. Public Health Service, and Dr. Antonio Montoya.)

WYOMING, UNIVERSITY OF, Laramie, Wyo.: 229 plants, mostly from Wyoming (167029, exchange); (through Dr. C. L. Porter) 1 plant from New Mexico (166155, exchange).

YALE UNIVERSITY, *School of Forestry*, New Haven Conn.: 5 wood samples (166622, exchange).

YARROW, J. R., Washington, D. C.: Plant from New York (167770).

YOUNG, Lt. E. S., San Francisco, Calif. (F. P. O.): 2 mollusks (167189).

YOUNG, JAMES BARCLAY, Stonington, Conn.: Pioto-Nazca bowl from an unknown site in Peru (165908).

ZETEK, JAMES, Balboa Heights, Canal Zone: 300+ land isopods and many small insects (165594).

ZODAC, PETER, Peekskill, N. Y.: 3 specimens of mesolite from Oregon and 1 specimen each of thomsonite and stilbite from New York (167233).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1943–44

REPORT

Report on the progress and condition of the United States National Museum for the fiscal year ended June 30, 1943. 8vo, iii+108 pp. January 1944.

BULLETINS

Bulletin 183. Archeological investigations in Platte and Clay Counties, Missouri. By Waldo R. Wedel. With appendix, Skeletal remains from Platte and Clay Counties, Missouri. By T. Dale Stewart. 8vo, viii+284 pp., 22 figs., 50 pls. October 1, 1943.

Bulletin 184. The metallography of meteoric iron. By Stuart H. Perry. 8vo, vii+206 pp., 9 figs., 78 pls. February 15, 1944.

Bulletin 185, part 1. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Compiled by Richard E. Blackwelder. 8vo, xii+188 pp. March 7, 1944.

Bulletin 185, part 2. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Compiled by Richard E. Blackwelder. 8vo, pp. 189–341. June 30, 1944.

PAPERS PUBLISHED IN SEPARATE FORM

FROM VOLUME 29, CONTRIBUTIONS FROM THE UNITED STATES NATIONAL HERBARIUM

Part 1. Taxonomic studies of Tropical American plants. By C. V. Morton. Pp. i–xi, 1–86. March 23, 1944.

FROM VOLUME 91 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i-viii, 521–529. October 26, 1943.

FROM VOLUME 92 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i-viii, 621–668. November 29, 1943.

FROM VOLUME 93 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i-viii, 609–647. April 13, 1944.

No. 3167. New species of buprestid beetles of the genus *Agrilus* from Trinidad. By W. S. Fisher. Pp. 375–380. July 26, 1943.

No. 3168. Some fungus beetles of the family Endomychidae in the United States National Museum, mostly from Latin America and the Philippine Islands. By H. F. Strohecker. Pp. 381–392, fig. 12. August 5, 1943.

No. 3169. Summary of the collections of snakes and crocodilians made in Mexico under the Walter Rathbone Bacon traveling scholarship. By Hobart M. Smith. Pp. 393–504, figs. 13–15, pl. 32. October 29, 1943.

No. 3170. The North American parasitic wasps of the genus *Tetrastichus*—a contribution to biological control of insect pests. By B. D. Burks. Pp. 505–608, figs. 16–21. October 26, 1943.

FROM VOLUME 94 OF THE PROCEEDINGS

No. 3171. Catalog of human crania in the United States National Museum collections: Non-Eskimo people of the Northwest Coast, Alaska, and Siberia. By Aleš Hrdlička. Pp. 1–172. April 6, 1944.

No. 3172. The catfishes of Venezuela, with descriptions of thirty-eight new forms. By Leonard P. Schultz. Pp. 173–338, figs. 1–5, pls. 1–14. February 11, 1944.

No. 3173. Revisions of two genera of chalcid-flies belonging to the family Eupelmidae from North and South America. By A. B. Gahan. Pp. 339–369. November 26, 1943.

No. 3174. New species of American scolytoid beetles, mostly Neotropical. By M. W. Blackman. Pp. 371–399, pls. 15–17. November 22, 1943.

No. 3175. A revision of the Embioptera, or web-spinners, of the New World. By Edward S. Ross. Pp. 401–504, figs. 6–156, pls. 18–19. January 19, 1944.

No. 3176. Twelve new species of Chinese leaf-katydids of the genus *Xiphidiopsis*. By Ernest R. Tinkham. Pp. 505–527, fig. 157. April 29, 1944.

FROM VOLUME 95 OF THE PROCEEDINGS

No. 3178. New American cynipids from galls. By Lewis H. Weld. Pp. 1–24, pls. 1–2. April 15, 1944.

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REPORT OF

THE UNITED STATES NATIONAL MUSEUM

1945

SMITHSONIAN INSTITUTION
WASHINGTON
D. C.

SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1945

Cx. 2. 63.

UNITED STATES
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UNITED STATES NATIONAL MUSEUM,
UNDER DIRECTION OF THE SMITHSONIAN INSTITUTION,
Washington, D. C., November 1, 1945.

SIR: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1945.

Very respectfully,

ALEXANDER WETMORE,
Director, U. S. National Museum.

THE SECRETARY,
Smithsonian Institution.

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REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1945

By ALEXANDER WETMORE
Secretary of the Smithsonian Institution, Director of the United States National Museum

OPERATIONS FOR THE YEAR

APPROPRIATIONS

FUNDS available for the National Museum for the fiscal year ended June 30, 1945, were provided by the appropriation "Salaries and Expenses, Smithsonian Institution" in the Independent Offices Appropriation Act approved June 27, 1944. These allotments are summarized as follows:

National Museum	$444,151
Maintenance and operation	451,843
Printing and binding	43,000
Total available for year	938,994

The allotment "National Museum" is concerned with the national collections in natural history, anthropology, engineering and the industries, and history, including their exhibition, preservation, and increase as well as research based on them. The allotment for "Maintenance and Operation" is for maintaining, operating, and guarding the buildings. The allotment for "Printing and Binding" covers the cost of publications and the necessary binding of books and pamphlets in the Museum library.

In addition to the regular appropriation, $10,525 was received for promotions granted under Public Law 200. The amount allotted for overtime service was $1,001 less than in the fiscal year 1944, but since this is a year-to-year allotment it has no influence on the amount of service available for the regular operation of the Museum. There was no change from 1944 in the funds available for miscellaneous expenses, for printing and binding, or for the personal services available to the Museum.

Owing to the serious reduction of personnel under the ceiling established in 1943, and to the necessity of continuing informational

and research services to the war agencies, it was necessary to postpone certain activities of the Museum. The functions most adversely affected by these wartime restrictions related to accessions, publications, cataloging and classification, renovation of exhibitions, and the normal research of the Museum. These difficulties were increased by considerable delays in filling vacancies and by the impossibility of obtaining certain sorely needed supplies and equipment. It is to the great credit of the staff that the varied activities of the Museum proceeded so well under these adversities. This has been possible only through their industry and ingenuity and the realization that they are the custodians of a trust that must be preserved for the science and culture of future generations of our Nation.

The principal factors that still retard the work of the Museum are lack of adequate space, shortage of personnel, and inadequate supplies and equipment. The national collections include one of the most complete gatherings of scientific materials of the kind in the world and contain much information that can be useful in the development of our natural resources, our agriculture, and our industry. The extent to which this usefulness can be realized is directly related to the personnel available to unlock this knowledge, to the space that will permit the proper arrangement and accessibility of the collections, and to the availability of working tools that will facilitate the study of the collections. It is planned that with the cessation of hostilities the Museum will resume many of its activities that were postponed owing to the heavy requirements placed upon the Nation by the global war.

Consideration of plans for additional housing was kept steadily in mind and the various projects were reconsidered to bring them down to date and have them in readiness whenever a program for public buildings was initiated. Additions to the Natural History Building through wings at either end have already been authorized by the Congress. The continuation of Ninth Street through the Mall to provide a through traffic lane across this section will cut through the eastern end of the present Arts and Industries Building, an antiquated brick structure completed in 1883 at a cost of $225,000, which is no longer suitable for modern installations in museum display. At the present time it is badly crowded and offers only a part of the space necessary for the great fields of interest that it is supposed to accommodate. Our program includes a separate building for Engineering and Industries, which will cover the field of aviation, in which the Smithsonian has the most historically important collection in the country. This collection should be displayed in an appropriate manner with space to include many additional objects. There is

great need as well for further room for expansion in all the industrial collections, which cover the record of American ingenuity and progress, and are thus the story of the growth and development of our Nation along these lines.

A separate building for American history is also planned, our present collections being displayed in the Arts and Industries Building. The existing space that can be assigned to this subject is badly crowded with no hope of necessary expansion in its present quarters. The collections contain some of the most valuable objects of their kind in existence, and they are viewed annually by many thousands of our citizens. The years of war that have just closed will yield many more mementos that must be displayed adequately for present and future generations. A building should be dedicated to this purpose alone.

The two projects, one for a building for engineering and the industries and one for a building for history, have been estimated for authorization by Congress.

COLLECTIONS

In examining the list of accessions acquired during the year it has been interesting to observe the steady flow of valuable specimens into the Museum collections. Most of the lots have been small but the aggregate number has been about average, a surprising fact in view of the widespread condition of war. A large part of the specimens came from service men and represented extensive areas from which we have had little or no material before. Specimens from various remote islands in the Pacific area are especially notable and in some instances are equal in importance to larger sendings from some of the continental areas.

New material came in 1552 separate lots, with a total of 232,822 specimens, distributed among the five departments as follows: Anthropology, 6,642; biology, 197,462; geology, 23,770; engineering and industries, 3,199; history, 1,749.

For examination and report 1,122 lots of specimens were received, covering all the fields embraced in our laboratories, an increase of 398 over last year. Some of this material is returned to the senders and some that is especially desirable remains as an addition to the Museum's collections.

Gifts of duplicates to schools, museums, and other institutions numbered 1,089 specimens. Exchanges of duplicate materials with other collections amounted to 19,351 specimens, and 1,782 specimens were transferred by request to other governmental agencies. Loans for scientific study to investigators outside Washington totaled 28,065 specimens. The summary of the collections given below has been

adjusted to reflect additions and eliminations from the various series and represents the material cataloged at the close of the fiscal year.

Anthropology	719, 333
Biology	14, 047, 650
Geology	2, 710, 613
Engineering and industries	142, 624
History	531, 180
Total	18, 151, 400

EXPLORATIONS AND FIELD WORK

The principal studies in the field, like those of last year, related directly or indirectly to the war and were considerably reduced below the usual level of times of peace. The results, however, were valuable and covered a variety of subjects.

In continuation of the program for the promotion of cultural relations with scientists in the other American republics in cooperation with the Department of State, Dr. E. A. Chapin, curator of insects, traveled in Chile for work in connection with entomologists and entomological collections in that country. Upon his arrival in Santiago arrangements were made by the Chilean Government for him to visit forested areas, both natural and artificial, the agricultural extension stations, and the agricultural schools in southern Chile between Santiago and the Island of Chiloé. About five weeks were spent on this trip, and many important contacts were made. Although the season was unfavorable, some very interesting insects were observed and collected. The last three weeks of Dr. Chapin's 2-month sojourn were spent in Santiago, where considerable work was done on the Chilean national collection at the museum. Arrangements were also made to assist the department of agriculture in Chile in their white-grub investigations and exchanges were arranged with certain collectors in Santiago.

In connection with this same program of cultural cooperation with the American republics, Dr. T. Dale Stewart, curator of physical anthropology, went to Mexico on March 8, returning on June 23. The primary purpose of this trip was to give training in methods of osteometry to the graduate students of the Escuela Nacional de Antropología. Owing to the recent activities of the Instituto de Antropología e Historia, of which the Escuela and Museo Nacional are part, Mexico is now one of the leading anthropological centers in this hemisphere. The subject of physical anthropology is handled by such able workers as Dr. D. F. Rubín de la Borbolla, the acting director of the Escuela, Sr. Javier Romero, curator in the Museo, Dr. Juan Comas, and Srta. Ada d'Aloja. Under them young students are developing who already have had extensive field experience. In addition, Dr. Stewart was able to study a collection of skeletal remains

in the Museo Nacional de Antropología collected by Dr. Eduardo Noguera earlier in the year at Xochicalco. This collection, although small, is unusually well preserved, and contains interesting examples of tooth mutilation and cranial deformity. The teaching and research supplemented each other, as the Xochicalco collection was used for demonstration purposes, particularly as regards restoration, sexing, aging, and pathological changes. Much interest in this field of research has developed as a result of this work.

The Department of Anthropology was further represented in the good-will program by the detail of Herbert W. Krieger, curator of ethnology, to attend conferences and conduct surveys at Isabela, Dominican Republic, relative to the exact location and possible restoration of the settlement established there by Christopher Columbus.

Another project was concerned with work in Haiti by Dr. Alfred Métraux, of the Institute of Social Anthropology, from September 18 to November 30. His investigations concerned anthropology and were made for the Museum in cooperation with the Bureau of Ethnology of Haiti and the Scientific Society of Haiti. For one month Dr. Métraux conducted cooperative archeological investigations on Tortue Island in the north, and for another month he was in Port-au-Prince engaged in lectures and anthropological investigations. During the entire period Dr. Métraux maintained close contact with the Scientific Society, for which he organized seminars for the discussion of anthropology.

In continuation of the ornithological reconnaissance of northeastern Colombia, M. A. Carriker, Jr., went into the field to complete the examination of the valley separating the Sierra Nevada de Santa Marta from the Sierra Perijá. At the end of the fiscal year he had moved into the lower elevations of the Sierra Nevada where this range extends to the east toward the Guajira desert. Excellent results were reported in additional specimens for our rich collections from this area. This work is financed by the income of the W. L. Abbott fund.

A few local collections were made by Dr. Leonard P. Schultz and Dr. Robert R. Miller, curator and associate curator of fishes, respectively, who secured fossils at Scientists Cliffs, on Chesapeake Bay, and fishes from various creeks in the State of Maryland.

Several of the insect specialists made extensive, largely local, collections within their own groups, some 3,000 specimens being added to the national collections through these efforts. Numerous new forms were obtained through these collections, especially to the coleopterous larvae and the Aleyrodidae. Most of the aleyrodid material was obtained by Miss Louise Russell from preserved plant material in the National Herbarium and in the herbarium of the New York Botanical Gardens.

Dr. Paul Bartsch, curator of mollusks, and Dr. J. P. E. Morrison, assistant curator, conducted several field trips for the purpose of acquainting members of the staffs of the National Naval Medical Center, Naval Medical School, and the National Institute of Health with the habitat of certain mollusks that might serve as intermediate hosts of trematode worms.

Paul S. Conger, associate curator in charge of the diatom collection, spent several weeks in the region of the Chesapeake Biological Laboratory in investigations concerning the food and fattening of oysters and other problems of diatom ecology. Mr. Conger's researches were sponsored by the Maryland Board of Natural Resources.

Dr. G. Arthur Cooper, curator of invertebrate paleontology, in company with Dr. Byron N. Cooper, of the Virginia Geological Survey, carried on further investigations in the complicated geology and paleontology of the nearby Appalachian Valley, during two brief field trips. The first, in July 1944, was designed to study facies changes in the Ordovician limestone (Chambersburg formation) from its type area near Chambersburg, Pa., to a point in the vicinity of Staunton, Va. About 2 weeks were spent in the study, which resulted in interesting information and good collections.

A second trip, which included Dr. Raymond S. Edmundson, also of the Virginia Geological Survey, extended these studies through the Ordovician rocks of southern Virginia and Tennessee. The party began the study about the middle of October near Athens, Tenn., and visited type sections of Ordovician formations in Virginia and Tennessee to see if the Tennessee formations could be recognized in southern Virginia. The men worked from Athens north to Knoxville, then went to Clinton, Tenn., and worked from there to Cumberland Gap in northern Tennessee. From here they traveled for a short distance along the Cumberland Front and on to Natural Bridge, and then to Harrisonburg to tie the studies into the work of the early part of the summer. The study was completed early in November.

The curator of mineralogy and petrology, Dr. W. F. Foshag, continued his supervision of surveys for strategic minerals in Mexico.

At the end of January 1944, Dr. Alexander Wetmore, assistant secretary, with Dr. J. P. E. Morrison, assistant curator, division of mollusks, as assistant, went to Panama in connection with some biological investigations for the War Department. Dr. Wetmore returned late in March leaving Dr. Morrison to continue the work until October. As one result the Museum now has extensive collections of birds, mollusks, and reptiles as well as valuable lots in other fields from some islands of the Archipiélago de las Perlas (Pearl Islands) that have not been known well previously.

THE MUSEUM IN WARTIME

It was with considerable relief that we were able during the year to bring back to Washington the thousands of valuable type specimens and other irreplaceable objects that early in the war had been removed from the Capital for safekeeping in the event of enemy air raids on the city. Return of this material, which aggregated more than 60 tons, was completed in November 1944, and by the end of the year most of the specimens had been reinstalled.

As in previous years since 1941, all possible efforts of the staff were concentrated on projects related to the prosecution of the war, directly or indirectly, though naturally these lessened toward the close of the year, as the end of the war became imminent. Again this year several members of the staff were called upon for work in connection with the Department of State's program for cultural cooperation with the other American republics. This entailed travel and study in Mexico and the Dominican Republic, respectively, by two Museum anthropologists, and in Chile by the curator of insects. Strategic geological work was conducted in Mexico in cooperation with the Geological Survey; and biological investigations in Panama were made for the War Department by two Museum staff members. Others undertook specific research projects directly connected with the war and its attendant disease, food, and other problems. Still others were granted furloughs for military service or for work with the Office of Strategic Services and other war agencies. Hundreds of specimens were identified for the Army and Navy, and special attention was given to material sent in by members of the Armed Services from remote corners of the earth where few or no collectors had previously been. All these activities add up to considerable when their far-flung results are carefully evaluated, and the Museum staff may be justly proud of its part in the war effort which now has ended so victoriously.

VISITORS

An increase of 197,951 visitors to the Museum buildings was recorded over the previous year, the totals being 1,730,716 for 1945 and 1,532,765 for 1944. August 1944 was the month of largest attendance, with 183,394 visitors; July, the second largest, with 177,065. Records for the four buildings show the following number of visitors: Smithsonian Building, 342,762; Arts and Industries Building, 674,920; Natural History Building, 531,712; Aircraft Building, 181,322.

A summary of attendance records is given in table 1:

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1945*

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building	
1944					
July	34, 764	68, 516	55, 433	18, 352	177, 065
August	35, 956	74, 468	55, 153	17, 817	183, 394
September	33, 842	62, 939	47, 153	18, 188	162, 122
October	33, 414	60, 665	48, 023	16, 867	158, 969
November	28, 227	56, 761	40, 440	14, 164	139, 592
December	19, 374	39, 374	32, 807	10, 652	102, 207
1945					
January	19, 095	38, 031	32, 447	10, 717	100, 290
February	21, 996	43, 877	37, 255	11, 973	115, 101
March	27, 402	54, 230	44, 864	15, 967	142, 463
April	32, 053	63, 804	46, 176	18, 306	160, 339
May	27, 317	55, 305	45, 980	13, 435	142, 037
June	29, 322	56, 950	45, 981	[2] 14, 884	147, 137
Total	342, 762	674, 920	[1] 531, 712	181, 322	1, 730, 716

[1] Not including 12,816 persons attending meetings after 4:30 p. m.
[2] Building closed June 4 and 5 and June 12 through June 15 during moving and assembling of Bell jet-propelled plane.

LIBRARY

The over-all picture of the growth of the Museum library and of its services during the year ended June 30, 1945, is not greatly different from that of the year before. Both growth and use might be described as normal for a war year. Such changes as there were followed or anticipated more or less closely the progress of the war itself. Demands made on our reference and informational resources by the war agencies were not quite so heavy on the whole. There was, for example, a noticeable and natural decline in their use of our collections of scientific voyages and travels as sources of geographical information.

Accessions from abroad were much the same in number and kind as in the preceding year, with almost no losses of material known to have been shipped. Toward the end of the year a few journals published during the years of enemy occupation had begun to come in directly from France and Belgium.

Most of the library's acquisitions, whether domestic or foreign, were made by purchase or exchange, but there were also, as always, a considerable number of gifts from members of the scientific staff and other friends of the Museum. Especially notable among these was a collection of more than 100 publications on photography presented by George R. Goergens. Included in the collection are many

rare items issued in the 1880's and 1890's that are important additions to the sectional library of the division of photography.

The cataloging of currently received material was well kept up on the whole, with now and then some unavoidable time-lag between the receipt of the publications and the completion of their preparation for use. Another permanent subprofessional assistant is much needed to make secondary and shelf-list cards, to do preliminary filing, and to relieve the professional catalogers of other routine and time-consuming tasks. The services of a highly competent cataloger for two months during the summer of 1944 were a great help in the cataloging program, and even resulted in a small reduction of the library's huge backlog of inadequately cataloged books and serial publications. To deal effectively with the backlog, however, it would be necessary to set up a carefully planned special project with a temporary staff of a sufficient number of well-qualified persons engaged to complete it within a specified time. The arrearage is too large and too complex ever to be completely and satisfactorily reduced by the regular staff, always busy with current work, or by the occasional temporary appointment of an extra cataloger or two.

A generous allotment of funds for binding again this year made it possible to prepare and send to the bindery 2,351 volumes, many of which have already been returned. In October a temporary position of bindery aide to do book mending was set up, and the results of the good work done in repairing and restoring 1,149 volumes are so obvious that there can be no question about the desirability of making the position permanent.

The Museum library is a working reference library and not a museum of fine books, but a large number of the most useful books on its shelves are old books. Many of them are rare and irreplaceable, and some of them are in fine bindings. Usage, shelf age, and dust all contribute to their physical deterioration, and constant care is needed to keep them in good condition.

The most serious unsolved problem in the physical care of the library continues to be shelf room adequate to house the existing collections and to provide for future growth. Even before the war the shelves in the Natural History Building were badly overcrowded, and only by moving several thousand volumes that could ill be spared to an inconvenient location in the attic stacks of the Arts and Industries Building could room be made to shelve the current accessions. Now the shelves in both buildings are filled, and in some sections the books are double shelved. Unless it is possible to obtain new shelving soon, and to find space in which to install it, the only relief to the situation would seem to be to box up and remove to dead storage some of the books in the less frequently consulted classes in order to make space for new accessions.

Besides the routine business of selecting, obtaining, classifying, and cataloging new publications, caring for existing collections, circulating books and periodicals, and giving reference, bibliographical, and spot informational service to readers and correspondents, some special pieces of work are noteworthy. First among these was the completion of Miss Mathilde M. Carpenter's Bibliography of Biographies of Entomologists, which was published in the American Midland Naturalist, vol. 33, No. 1, pp. 1–116, January 1945. This fine and useful piece of work, undertaken because of constant demands for information, sometimes very hard to find, about the lives and publications of collectors and students of insects all over the world, had occupied all the time that could be spared from Miss Carpenter's routine duties in the division of insects for several years.

Another important special piece of work was the preparation of the record of the Museum's serial holdings for inclusion in the forthcoming supplement to the Union List of Serials, one of the most useful of bibliographical tools for a scientific library.

In the Arts and Industries library, the taking of an inventory was continued as time permitted, and catalog and shelf-list records for the contents of 42 shelves were revised.

On April 3, a joint meeting of the Museum group with the Geography and Map group of the Special Libraries Association's local chapter, at which Dr. Wetmore gave a talk on his travels in the Guajira Desert of Northeastern Colombia, offered an opportunity to place on exhibition a few of the library's rare illustrated books on museums and natural history that had recently been brought back after their evacuation from Washington for safekeeping. The little exhibit received a good deal of favorable notice both on the evening of the meeting and from later visitors to it.

A number of changes were made in the staff. Miss Elizabeth G. Moseley, who had been in charge of serial publications and binding, resigned on August 31, 1944, and her position was filled by the appointment of Miss Mary L. Fleet on October 16. Miss Leona Haviland was appointed library assistant on September 18 and was assigned to duties in the cataloging division. From June 30 to August 31 the cataloging division had the services of Miss Beatrice E. Smith under temporary appointment. By transfer from the division of insects to the library staff Miss Mathilde M. Carpenter was promoted on August 31 to the position of biological aide in charge of the library of the division of insects. On October 9 Mrs. Carmen G. Randall was transferred from the temporary position of library assistant and promoted to the temporary position of senior bindery aide.

Statistics

Accessions of cataloged volumes	2,852
Volumes, pamphlets, and maps cataloged or recataloged	3,420
Periodical parts entered	6,310
Cards added to catalogs and shelf-lists	14,289
Volumes sent to the Public Printer for binding	2,351
Volumes repaired in the Museum	1,149
New exchanges arranged	140
Circulation of books and periodicals by the main library	8,191
Publications sent to sectional libraries for intradivisional circulation and filing	3,531

The estimated number of cataloged volumes now in the Museum library is 233,545. Not included in this figure are incomplete volumes of periodicals, wholly uncataloged material, and the large collections of pamphlets on special subjects in the sectional libraries.

PUBLICATIONS AND PRINTING

The Museum was allotted a total of $43,000 for its publication requirements during the fiscal year 1944–45, the same sum as for the previous year. Of this, $24,000 was used for printing Bulletins and Proceedings, $15,000 for binding, and $4,000 for the salary of the Museum printer. Twenty publications were issued—1 Bulletin, 1 Contribution from the National Herbarium, and 18 Proceedings papers. A list of these publications is given on page 111. Volumes bound totaled 2,351.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 33,264 copies, while in addition 7,001 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

The editor, Paul H. Oehser, continued to serve as chairman of the Efficiency Rating Committee of the Smithsonian Institution and devoted considerable time to the efficiency-rating program.

Indexing.—Miss Gladys O. Visel, editorial clerk, and Mrs. Marguerite W. Poole, information clerk, have continued work as time permitted on the general index of Museum publications. Indexing of the publications issued prior to the year 1900 is nearing completion. Indexes for Proceedings volume 94 and for Bulletins 186, 187, and 188 also were prepared in the editorial office during the year.

Museum print shop.—F. W. Bright was detailed from the Government Printing Office, as in previous years, to print museum and herbarium labels and special forms at the Museum print shop, a branch of the Government Printing Office. Mr. Bright completed 132 of the 155 requisitions submitted for printing; 5 that were submitted during the previous fiscal year were likewise finished, making a total of 137 for the year. Of the uncompleted requisitions, 8 represent

large exhibition labels or specimen labels, involving much hand setting of type or long press runs. The remaining 15 requisitions were submitted too late in the year for completing before June 30. With the exception of these, the work of the print shop is nearly up to date.

PHOTOGRAPHIC LABORATORY

In continuation of the cooperative arrangement between the Smithsonian, the National Zoological Park, and the Bureau of American Ethnology, the photographic laboratory has made 3,305 negatives, opaked 119, and retouched 26; processed 1,394 microfilm negatives (74 of which were for the Army Medical Museum under an exchange plan), 111 lantern slides, 10 transparencies, 87 kodachromes, 28 photomicrographs, 227 dry mounts, 31 cloth mounts, 12,130 prints, and 1,422 enlargements; and developed 15 rolls of film. Many of the requisitions for photographic services were in connection with information furnished the armed services.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—Repairs of a routine nature engaged most of the time of the skilled labor force. In the Arts and Industries Building, however, two important pieces of work were undertaken: A security storage vault was constructed in the division of history for the protection of valuable coins and medals; work was begun on the construction of two rooms to house a seventeenth-century apothecary shop, an exhibit which will doubtless be very popular when installation is completed.

Heat, light, and power.—Electric current used during the year amounted to 1,544,139 kilowatt-hours.

In line with the governmental program of coal conservation to help in the war effort, steam was cut off in all buildings an hour a day for two and a half months, and during that period a saving of 4,000,000 pounds was effected. Because of unusually low temperatures during the winter, however, the over-all saving was only 1,908,081 pounds. The total steam consumption for the fiscal year was 57,121,888.

Ice production.—The Museum ice plant produced 183 tons of ice at a cost of $2.70 a ton, exclusive of labor. Twice during the year the plant was closed for emergency repairs and during these periods ice in the amount of 4½ tons was purchased at a cost of $5 a ton.

Fire protection.—Of the $1,182.79 spent for fire protection, more than a thousand dollars was used for the purchase of new equipment. The principal items purchased were five wheel-type extinguishers, and hose for testing the standpipes on the exhibition floors. Inspections of apparatus were made each month, and soda and acid extinguishers were discharged and recharged.

Air-raid alarms were removed and many of the gongs were replaced in the exhibition cases. The work of completing the reinstallation will be continued during the coming year.

Two old fire plugs were removed from the Astrophysical Observatory yard and connections were made with the District of Columbia mains from the group of buildings located near the Smithsonian building. The two plugs that were removed were so old as to have become museum specimens, and they will be preserved by the division of engineering.

Furniture and fixtures.—Furniture acquired during the year consisted of 23 exhibition cases and bases and 85 items of storage, office, laboratory, and other furniture. Condemned and disposed of were 10 exhibition cases and bases and 39 pieces of storage cases, office, laboratory, and other furniture. On hand on June 30, 1945, were 3,535 exhibition cases and 20,414 pieces of storage, office, laboratory, and other furniture; 118,539 drawers, boxes, and wing frames.

MEETINGS AND SPECIAL EXHIBITS

The Museum continued to make available the auditorium and lecture room of the Natural History building to educational, scientific, welfare, and governmental organizations and groups for meetings and lectures. During the past year 236 groups availed themselves of this opportunity.

The foyer and adjacent space in the Natural History building, customarily used for special exhibits, were in constant use. The 12 special exhibits were:

July 3 to 14, 1944: Exhibit by the Boy Scouts of America illustrating work carried on by the Scouts during their meetings and field trips.

July 15 to August 31, 1944: Cultural survey of Burma, Thailand, Malay States, Sumatra, Borneo, Java, the Philippines, and Formosa. The exhibit was in the form of enlarged photographs of native people, houses, and cultural objects of these areas.

September 1 to 31, 1944: Exhibition of oil and water-color paintings under the auspices of the National Photograph Society.

October 1 to 31, 1944: Exhibition by Mrs. Enit Kaufman of oils and water colors painted through the years by members of her family.

November 1 to 30, 1944: Exhibition of oil and water-color paintings under the auspices of the D. C. Federation of Women's Clubs.

December 1 to 31, 1944: Exhibition of oil paintings of members of American Indian tribes by Tom J. Moore.

January 1 to 31, 1945: Exhibition of water-color paintings by Carl Sahlin, under the auspices of the Pan American League of Miami, Fla.

February 1 to 28, 1945: Exhibition of Cuban modernistic oil paintings under the auspices of the Pan American Union.

March 1 to 31, 1945: Exhibition of oil and water-color paintings under the auspices of the Society of Washington Artists.

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April 1 to 31, 1945: Pan Americanism in postage stamps—an exhibition of stamps arranged to represent the several South American republics, under the auspices of the Pan American Union.

May 1 to 31, 1945: Exhibition of the handicrafts of Great Britain, comprising principally glassware, silverware, china, pottery, and weaving.

June 1 to 30, 1945: Exhibition of photographs and kodachrome prints entered in competition by the members of the Potomac Appalachian Trail Club.

CHANGES IN ORGANIZATION AND STAFF

Changes during the year in the organization and staff included the advancement of John E. Graf from associate director, United States National Museum, to the position of assistant secretary of the Smithsonian Institution, on April 1, 1945.

The department of anthropology lost through retirement Richard G. Paine, scientific aide in the division of anthropology, on February 28, 1945, and to this vacancy Joseph R. Caldwell was appointed on April 9, 1945. Robert A. Elder, Jr., was appointed assistant curator in the division of ethnology on May 16, 1945.

On the staff of the department of biology an honorary appointment was conferred on Maj. W. L. Jellison, A. S. F., U. S. A., as collaborator in the division of insects, on August 2, 1944. Other additions were the appointment of Dr. Raymond M. Gilmore, associate curator in the division of mammals on September 2, 1944; Mrs. Marie P. Fish, scientific aide in the division of fishes, on December 4, 1944; William E. Hoffmann, associate curator in the division of insects, on August 18, 1944; and Mrs. Mildred S. Wilson, assistant curator (aquatic biology), in the division of marine invertebrates, on August 21, 1944. Three employees left the service: James O. Maloney, aide in the division of marine invertebrates resigned effective April 15, 1945; John A. Mirguet, osteologist, retired October 31, 1944; and Earl D. Reid, scientific aide, division of fishes, retired February 28, 1945.

Through the retirement of Nicholas W. Dorsey, accountant and auditor, on May 31, 1945, after long service to the Museum, Thomas F. Clark was advanced to this position on June 16, 1945. Mrs. Anna W. Murray was appointed assistant accountant and auditor on April 30, 1945, to fill the position made vacant by the transfer of Mrs. Florence L. Weirich to the Department of Agriculture on April 8, 1945.

Other changes on the administrative staff during the year were the resignations of Mrs. Margaret M. Pflieger, assistant purchasing officer on February 28, 1945, and Mrs. Margaret L. Vinton, personnel assistant, on January 4, 1945. These vacancies were filled by the promotion of Armstead D. Hilliard and Gertrude R. R. Bogdan, respectively, on March 1, 1945.

On the staff of maintenance and operation, William Crossingham, mechanic (foreman of paint shop), retired September 30, 1944, and on October 9, 1944, Axel J. Anderson succeeded him in charge of the paint shop.

The following, upon completion of military duty, returned during the year to their positions in the Museum: Reuben W. Gore, February 14, 1945; Robert E. Kirk, May 16, 1945, and John B. J. Peck, January 12, 1945. On February 26, 1945, Oliver N. Armstead was furloughed for military duty.

Through the operation of the retirement act, 11 employees were retired, as follows: For age: Mrs. Marie Arm, forewoman of charwomen, on August 31, 1944, with 32 years 3 months service; Nicholas W. Dorsey, accountant and auditor, on May 31, 1945, with 50 years 3 months service; Richard G. Paine, scientific aide, on February 28, 1945, with 44 years 4 months service. Through optional retirement: William Crossingham, mechanic (foreman of paint shop), on September 30, 1944, with 47 years of service; Harry Kaiser, mechanic (painter) on June 30, 1945, with 35 years 10 months service; John A. Mirguet, osteologist, on October 31, 1944, with 35 years 4 months service; Earl D. Reid, scientific aide, on February 28, 1945, with 34 years 8 months service; Clarence T. Taylor, guard, on June 30, 1945, with 25 years 7 months service; and Mrs. Eleanor C. White, scientific aide, on November 30, 1944, with 25 years 8 months service. Through disability retirement: James W. Burns, guard, on May 31, 1945, with 9 years 11 months service and Winfield S. Dean, mechanic, on November 1, 1944, with 18 years 7 months service.

Through death the Museum lost during the year Louis B. Hanks, guard, on June 21, 1945, and Carter C. Wood, laborer, on April 2, 1945.

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Head Curator*)

THE limited staff extended every effort during the year in the preparation of special exhibitions relating to those areas of the South Pacific and the Asiatic mainland where members of our armed forces have been engaged in military and naval operations. They kept current all regular routine assignments and reduced as rapidly as possible the accumulation of large archeological collections recovered before the attack on Pearl Harbor.

Our popular exhibition of emergency rescue equipment was revised, and new equipment was added as soon as war restrictions permitted. A symbol of gratitude in the form of a doll for the children of those men who drove out the Nazis from Normandy, which had been presented to our Supreme Commander, Gen. Dwight D. Eisenhower, was placed on special exhibition. A remarkably fine collection of early American silver assembled by the late Arthur Michael and bequeathed to the Smithsonian Institution was placed on public view at the close of the year.

In connection with the Department of State's program of cultural cooperation with the other American Republics, Dr. T. Dale Stewart, curator of physical anthropology, was detailed to teach osteometry to graduate students at the Escuela Nacional de Antropología, Mexico City, from March 8 to June 23, 1945. In addition to this teaching he was enabled to make a study of the recovered skeletal material from Xochicalco now in the Museo Nacional de Antropología, which was collected by Dr. Eduardo Noguera.

A similar gesture of good will was accomplished upon the acceptance of an invitation from the Sociedad Colombista Panamericana by detailing Herbert W. Krieger, curator of ethnology, to spend the month of May attending conferences and conducting surveys in relation to the exact location and possible restoration of the settlement established by Columbus at Isabela, on the north coast of the Dominican Republic.

During the first part of June the head curator examined the famous archeological sites of Kolomoki, near Blakely; Ocmulgee, near Macon; and Etowah, near Cartersville, Ga. As a result of his recommendations a specific program of preservation has been inaugurated by the State of Georgia in regard to Kolomoki and Etowah. As a member

of the Advisory Board of the National Park Service he attended a historical conference at Morristown National Historical Park in New Jersey on June 7–8, 1945.

Requests from the war agencies to examine and identify specimens from the Pacific area continue. Other Government agencies, especially the Federal Bureau of Investigation, have used the facilities offered by the department. The division of physical anthropology was fortunate to obtain the voluntary services of Dr. Beatrice Bickel, former librarian at the Surgeon General's Library, to catalog the books in the division's library assembled by the late Dr. Aleš Hrdlička.

ACCESSIONS

During the year the department of anthropology received 57 accessions totaling 6,642 specimens as compared to 852 specimens received during the previous year. This increase is largely due to the reduction of a backlog of accumulated specimens in the division of archeology which could not be processed during the years in which they were received because of lack of sufficient laboratory space and manpower. The 57 accessions were assigned within the department as follows: 2 loans of material for special exhibitions in the foyer of the Natural History Building assigned to the head curator's office, consisting of an exhibition on modern British crafts and the addition to the emergency rescue equipment exhibition of an emergency sustenance vest, issued to Army fliers; archeology, 23; ethnology, 22; period art and textiles, 1; physical anthropology, 9. The most noteworthy specimens received under the above accessions are briefly described under the divisions to which they pertain.

Archeology.—Two painted Neolithic jars, a gift from Gen. Ku Chung-lun, chairman of the Kansu Provincial Government, on the occasion of Vice President Henry A. Wallace's visit to northwestern China in June 1944, were presented by Mr. Wallace; 5,677 specimens excavated from Indian village and burial sites in Scott and Lane Counties, Kans., were collected for the Museum in 1939 under the direct supervision of Associate Curator Waldo R. Wedel; 343 archeological specimens from the Kansas collection of the late Dr. Norman L. Roberts were donated by Mrs. Roberts; 10 Nasca and Early Chimu vessels from Peru were presented by Mrs. Emerson Howe in memory of her daughter and son-in-law, Sr. and Sra. A. González de Prada; an old Chamorro stone adz found in a shell hole during the initial fighting on Saipan, Marianas Islands, was presented by Capt. Allan W. Phelps, M. A. C.

Ethnology.—Included in the year's accessions were collections from the Northwest Pacific Coast and Alaska, Micronesia, Polynesia, the Solomon Islands, New Guinea, Burma, China, Jivaro Indians of Ecuador, and several North American Indian tribes.

An important contribution to the Micronesian collection was the gift from Dr. V. W. T. McGusty of a large model outrigger canoe from Tarawa in the Gilbert Islands. This canoe is the Gilbertese *baurua*, generally called war canoe, but a craft whose uses are far more varied than the name would imply. It is a model of the usual deep-water craft of the islanders, the vehicle of interisland traffic of all kinds. The hull is built of four slabs of timber, lashed end to end and edge to edge with sennit. It is equipped with a triangular mat sail, movable mast, spars, steering oar, and three paddles. When space is available it is the plan of the division to place this interesting specimen on permanent exhibition.

An interesting addition to the collections is a royal Hawaiian cape (*ahuula*), which is fully feathered with tufts of black and pale yellow feathers of the *oo* bird and with red feathers of the *iiwi* mounted on a medium meshed net of olona fiber tailored to form a foundation in the shape of a flattened, irregularly margined semicircle.

Two specimens from eastern New Guinea received through transfer from the National Zoological Park are particularly noteworthy. One, a wooden figurine, is a stylized carving of an ancestral figure, and the other, a boat bailer, is cut from solid wood, with handle inside the trough and a stylized bird carving projecting from the proximal end.

An Arab costume presented to Gen. H. H. Arnold by Abdul Aziz I'bn Saud, King of Saudi Arabia, was lent to the Museum by General Arnold. The costume consists of an embroidered headdress and coil, a robe embroidered in gold thread, and an inscribed sword. This costume was placed on temporary exhibition for several months.

Other accessions of importance include a walrus tusk engraved by a Maritime Chukchee, donated by John G. Haviland, and a collection of woven decorative pouches from the Otomi Indians in the State of Hidalgo, Mexico, presented by Dr. W. F. Foshag.

The section of period art and textiles received through deposit from the Smithsonian Institution the well-known Arthur Michael collection of early American silver, which constitutes one of the most outstanding bequests received by the Institution during the past few years. Among the 121 silversmiths whose work is represented are some of the most outstanding craftsmen of the Colonial and Federal periods (1675–1850). The earliest American silversmith represented is John Coney, famous not only for the excellent quality of his silverware but also because he was the engraver of the plates used for the printing of the first paper currency in America. The collection includes examples of silver candlesticks and a pitcher made by Paul Revere, Sr., who served as an apprentice to John Coney, as well as several artistic pieces by his son, the patriot Paul Revere. Such families as the Burts of Boston (John Burt and his sons Benjamin, Samuel, William), the Hurds (Jacob Hurd and his sons Benjamin and

Nathaniel), and others are well represented. A great variety of patterns is shown by individual silversmiths even in the more commonly duplicated objects, which include numerous tankards, porringers with keyhole piercing, goblets, cans, teaspoons and tablespoons, teapots and coffee pots, cream pitchers, and sugar bowls. Other objects included in the exhibition are brandy saucepans, skewers, large 2-handled punch strainers, smaller single-handled tea or coffee strainers, scissors, sugar tongs, a silver fork (rare in Colonial collections), muffineer or caster, candlesticks with baluster stem, candle snuffer and tray, patch or snuff boxes, knee buckles, wine taster, riding spurs, dress sword, alms basin, and chalices. Most of the silver in the collection was produced during the eighteenth century, which usually is divided into three periods. The objects made in the first period are essentially plain and unornamented, with practically no embossed or engraved decoration, but showing originality, skill, and fine feeling for form. In the second period, middle eighteenth century, shapes are generally made up of curves, with ornament consisting of a combination of shells, fantastic scrolls, leafwork, and escutcheons, but all tending toward lightness of effect. The third period was influenced by examples of classic art excavated about the middle of the eighteenth century at Pompeii and Herculaneum. The classic style is formal, delicate, and graceful and expresses itself chiefly in straight structural lines and by slender columns, pilasters, flutings, and moldings.

This collection forms an exceedingly worth-while nucleus for the addition of future collections of this nature. An excellent opportunity to study and become acquainted with Colonial silver has been afforded visitors to the National Museum by a temporary exhibition in the lobby of the Natural History Building.

Physical anthropology.—Out of the 78 specimens received by this division the following are considered noteworthy:

Twenty-two skeletons from Amchitka Island in the Aleutians came as a gift from Capt. Paul Guggenheim, Medical Corps, Army Air Forces, who in 1937 spent a season in this region as a member of the late Dr. Aleš Hrdlička's field party. This collection, recovered during the Army's recent occupation of the island, supplements the material obtained by Dr. Hrdlička in 1938.

A collection of 35 embryological specimens was donated by Dr. Samuel Rabkin. For many years Dr. Rabkin has been assembling embryos and fetuses, which he has cleared by the Schultze technique in order to demonstrate the stage of skeletal development. This interesting and unique collection provides the division with an unusually complete series for research in the early stages of human development.

Three specimens from various localities recovered under conditions suggesting considerable antiquity were received: One from a gravel pit near Campbell, Minn., sent as a gift by Orville R. Edner, through Robert Teeters; another from Clear Fork, 60 miles northeast of Abilene, Tex., by Dr. Cyrus N. Ray; and the well-known skull of *Homo novusmundus*, found near Folsom, N. Mex., in 1935 and described and donated by the late J. D. Figgins.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Several special exhibitions were prepared and installed in the foyer and lobby of the Natural History Building for a temporary period. These were assembled under the supervision of the head curator assisted by the staff in the division of ethnology and installed through cooperation of the superintendent of buildings.

From July 15 to August 31, 1944, the entire foyer was used for an exhibition entitled "Cultural Survey," illustrating decorative arts and handicrafts made by the native peoples of Burma, Thailand, Malay States, Sumatra, Borneo, Java, the Philippine Islands, and Formosa. This exhibition was well received by the many service men and women visitors who for the first time had an opportunity to examine objects from some of the ancient sophisticated conservative cultures as well as those from more primitive inhabitants in this South Pacific and Asiatic area.

In December 1944 three new temporary exhibitions were installed and the air-sea rescue exhibition was completely renovated by the substitution of new equipment loaned to the department by the Air Sea Rescue Agency of the United States Coast Guard. During this same period an exhibition of "Rocky Mountain Indian Paintings" by Tom James Moore was placed on view. These paintings were portraits of Indians belonging to the Blackfoot, Flathead, Kutenai, and Shoshoni tribes.

Mentioned elsewhere in this report (division of history) is the beautifully costumed doll that was sent to the Museum by Gen. Dwight D. Eisenhower, to whom it had been presented by the children of Normandy in gratitude for their liberation from the Nazis. This fine example of Breton doll-making was prominently featured and placed on public display by the division of ethnology among some of the general exhibits in the Natural History Building.

Received as a loan from Gen. H. H. Arnold was a Bedouin costume similar to those worn by members of the royal family in Saudi Arabia, presented to General Arnold by Abdul Aziz I'bn Saud, King of Saudi Arabia. It consists of a full-length homespun robe embroidered with gold thread, a colorful headdress and gold-wrapped coil worn only by royalty, and an inscribed sword. The costume was draped over a

manikin representing a typical individual from Saudi Arabia and placed on exhibition.

In May 1945 the head curator assisted Miss Muriel Rose in the arrangement and installation of a large exhibition of modern British crafts. This consisted of several furnished room interiors and a miscellaneous group of handicrafts such as furniture, ceramics, linens, glass, and silver.

By June 1945 the staff in the division of ethnology had completed the classification and cataloging of the large Arthur Michael collection of early American silver. The pieces were then arranged according to silversmiths in two large exhibition cases for special display. The quality and beauty of these specimens made by the master craftsmen of their period have aroused considerable interest during the short period that they have been on public view.

Archeology.—During the fiscal year four entirely new exhibits were installed and nine others revised. Nine boxes of specimens evacuated for the war period were restored either to exhibition or to the study collections.

Sorting and marking of the Museum-Gates collections of 1905, begun during the previous year, were completed during the third quarter. Following their return from evacuation, rare copper plaques exhumed in 1885 at the Etowah Mound in Georgia, and from other sites, were partially cleaned and otherwise prepared for temporary protection between glass. To insure their permanent preservation these priceless examples of aboriginal American art should be mounted finally in some variety of transparent plastic. Prehistoric Peruvian textiles and associated materials were unwrapped, identified in most instances, and marked with their respective catalog numbers.

Associate Curator Wedel unpacked and analyzed his 1939 and 1940 Kansas collections, and prepared the customary descriptive lists for accessioning. The collections representing the 12 Hrdlička expeditions to Alaska and the Aleutian Islands were again separated from one another; the collection for 1936 was cataloged and a beginning made on that for 1937. Preparation of these two large accessions, from Kansas and from the Aleutians, respectively, reduces the arrearage noted in the last Annual Report by 6,645 specimens.

Ethnology.—A minimum personnel, consisting of a curator, a newly appointed assistant curator, and a clerk-stenographer, performed the varied duties necessary for the care of the normal collections of the division and the three sections under the jurisdiction of the division. Continued close cooperation and wide adaptability within the staff served to fulfill the numerous requirements for service; nevertheless additional personnel is needed to maintain the collections and to give the service requested through correspondence and by daily visitors. All current accessions have been properly cared for and

entered in the permanent records of the division. Specimens have been placed either on exhibition or in the study series. In the cleaning, restoration, and preservation of specimens the laboratory of the department of anthropology continued to contribute valuable assistance in making the collections more usable. Considerable time and effort were given by the entire staff in the preparation and installation of special exhibitions as described in the general statement pertaining to such activities for the whole department.

Physical anthropology.—No important changes were made in the permanent exhibitions during the year. Two exhibition cases were retained in the division offices as a result of last year's reorganization. This year the interiors of both of these cases were painted, and one of them was selected to demonstrate the development of the skeleton. On one side skeletons were laid out to show the changes in size and epiphyseal development from birth onward. On the other side a series of innominate bones was arranged to show changes in the pubic symphysis between the ages of 20 to 70 years. In the upright central portion a fluorescent panel was installed to form a lighted background for the embryological specimens donated by Dr. Samuel Rabkin. These working exhibits are frequently referred to in the course of determining the ages of miscellaneous human skeletons. Further progress was made in the improvement of the storage arrangements. The drawers in rooms 343–349 and those on the south side of the corridor outside the division were painted a light gray, which has lightened both the rooms and the corridor. Following this, numbers were stenciled on the drawers as the initial step in the installation of a numerical finding system. With the removal of the threat of air bombardment, the material that was evacuated from the division in 1942 was returned and stored temporarily on the fourth floor. In the course of the year most of the boxes were unpacked and the specimens returned to their proper places in the study collections.

The return to the Museum of evacuated specimens created a problem as to the disposition of the large zoological brain collection. Since no provision had been made in the reorganization of the division offices for the housing of this collection on the third floor, it was decided to divide it—to allot the brains of mammals, birds, and reptiles to their respective divisions in the department of biology and retain only the human brains within the division. The number of human brains is small compared with the entire collection, and it was found that they could be adequately accommodated in room 374. Except for the possible fire hazard resulting from the presence of alcoholic specimens on the third floor, this arrangement in a room with a cement floor and running water is entirely satisfactory and makes it possible to service the collection with a minimum of labor.

At the close of the year the large and important collection of Indian skeletal material donated by Dr. P. F. Titterington had been unpacked, sorted, and repaired. This collection, not yet accessioned, consists of approximately 400 skeletons from Calhoun and Jersey Counties, Ill. This task was accomplished largely by the energy and resourcefulness of the scientific helper during the three and a half months' absence of the curator.

Anthropological laboratory.—During the year the chief preparator, Andreas J. Andrews, completed a piece mold and cast of the portrait bust of Dr. Aleš Hrdlička that was modeled in the laboratory. A base was made with raised inscription to complete the plaster bust, and the entire figure was then bronzed. It has now been placed on exhibition near the Hrdlička memorial in the division of physical anthropology offices. A manikin was constructed and outfitted with the Bedouin costume presented to Gen. H. H. Arnold by Abdul Aziz I'bn Saud, King of Saudi Arabia. Piece molds and 21 casts of classical heads were made for the Newton D. Baker General Hospital, Martinsburg, W. Va. From February 8 through March 15, 1945, the chief preparator was assigned to the David Taylor Model Basin to assist in the building of a diorama for the Bureau of Ships, Navy Department. Miss Bertha P. Dutton, curator of ethnology, Museum of New Mexico, was assisted in making molds of the prehistoric man series of sculptures for her museum. An improved signal mirror was mounted in the emergency rescue equipment exhibition.

For the division of archeology Mr. Andrews made two copies in natural color of the Tuxtla statuette and a duplicate in natural color of a pipe in the form of a deity. An embossed copper design of a dancing human figure was mounted between glass; a petrified mastodon tooth, some fragments of basketry, and specimens of corn-on-cob were treated with a preservative; an Indian dugout boat was cleaned; two gourds and a petrified rib were repaired; a carved wooden dagger with a figure on the handle was cleaned and restored; and numerous pieces of Indian pottery were repaired and restored.

For the division of ethnology the laboratory polished 144 pieces of early American silver and a Chinese silver bowl. The design on a Northwest coast canoe was restored; seventeen 3-inch labels for the cultural survey exhibition were made and installed; the figure of a woman in the family group of Philippines was repaired; the armor worn by the first Governor of Alaska (a Russian) was treated with a preservative; and numerous minor repairs and restorations on specimens were completed.

Two replicas in natural color and an endocranial cast of the Vero skull were made for the division of physical anthropology; a cast of the Melbourne skull was painted; endocranial casts of 31 human and 9 orang skulls were made and painted.

For other departments within the Smithsonian the following assignments were completed: The manikin for the exhibition of the dress of Mrs. Calvin Coolidge was repaired and repainted, and a piece mold and 20 casts of a woman's torso were made and painted for the division of history. A modillion from which 14 casts are to be made was modeled for the division of medicine and public health. Four copies in natural color of an arrowhead from San Jon, N. Mex., were made for the Bureau of American Ethnology. Duplicates in natural color of two type specimens were made for the division of invertebrate paleontology. The statue "The Fallen Gladiator" was repaired and painted for the National Collection of Fine Arts. Three pieces of pottery were repaired for the modern British crafts exhibition.

INVESTIGATION AND RESEARCH

Even though the demand by the various war agencies for identification of specimens from distant primitive groups has somewhat decreased, the number of visitors submitting objects as well as of specimens received through the mail has increased. This department, because of the variety of disciplines under its jurisdiction, found it necessary to devote considerable time to the wide gamut of inquiries submitted to the Museum and Smithsonian Institution. Along with this time-consuming service to the public, several manuscripts were in preparation throughout the year. Then, too, the curators of physical anthropology and ethnology were detailed for teaching and research in Mexico and the West Indies for a period of several months. Such absences, owing to the understaffed condition in both of these divisions, placed additional burdens and responsibilities on the remaining staff members. Nevertheless, considerable investigation and research were concluded during the year, as indicated by the divisional reports that follow.

During the early part of May the head curator spent 10 days in Georgia reexamining the large archeological site of Kolomoki, near Blakely, in the southwestern part of the State. Every effort is being made to preserve this unusual prehistoric site, consisting of one of the three largest aboriginal mounds within the State. The head curator also visited Ocmulgee National Monument at Macon and the famous Etowah mound group near Cartersville. In June Mr. Setzler participated in a conference at Morristown, N. J., to outline the contribution that controlled archeological field work can make in a study of our early American settlements such as Jamestown, Va., St. Augustine, Fla., and Plymouth, Mass.

Throughout the fiscal year 75 lots of specimens were received by the department for identification and report. This represents an increase of 32 such lots over the previous year. All these were subsequently returned to the owners. Out of a total of 831 official letters

submitted to the various divisions within the department, 70 percent, or 583, were prepared for official reply, representing many man-hours spent in research and investigation. These statistics do not include the numerous identifications supplied to visitors and colleagues coming directly to the offices of the various curators or the correspondence resulting from such visits.

Archeology.—At times during the year the curator found opportunity to resume his long-delayed report on collections obtained at Pueblo Bonito, N. Mex. Associate Curator W. R. Wedel completed his analysis of the archeological collections he excavated in Kansas during 1939 and 1940, and at the close of the year he had under way a monograph on his field work in that State from 1937 through 1940. As heretofore, he has made direct reply to various individuals and institutions primarily concerned with the archeology of the Great Plains and Upper Mississippi Valley.

Twenty-eight lots of material were received for examination and report and subsequently returned to the senders. During the previous fiscal year 13 such lots were reported upon.

Ethnology.—The classifying and cataloging of ethnological and auxiliary collections were diligently pursued throughout the year. Supplying information for individuals and organizations continued to assume major proportions. Though the compilation of data was still requested by the war agencies and armed forces, this aspect of the work materially decreased during the year.

Assistance by the division in the research work of outside investigators consisted primarily in making available for examination specimens from the collections. The files of photographs, paintings, manuscripts, and other documentary data and the indexed references to filed classified data were in almost constant use. The demand by individual correspondents and visitors for photographs is steadily increasing. This involves the assembling of appropriate specimens to be photographed and the identification and captioning of prints.

Government departments and agencies continued to use the division's files and collections. The study and identification of ceramics, silver, glass, and lace continue to be of primary interest to the public, and compiling information for distribution to interested persons requires much time on the part of staff members.

Forty-two written reports were made pertaining to the examination and identification of individual specimens and collections, totaling 106 specimens. These reports covered ethnological specimens, silver objects, ceramics, laces, rugs, cutlery, jewelry, and musical instruments. The number of visitors to the office of the division seeking information or an informal report on specimens brought in person for examination and identification greatly exceeded the number of

enumerated written reports. Several bibliographies were prepared and forwarded to correspondents.

Dr. José T. Barón, Minister Counselor of the embassy of Cuba, following instructions from the Minister of State of his government, on April 25 transmitted to the curator of the division, H. W. Krieger, an invitation of the Sociedad Colombista Panamericana to participate in work on the investigation and restoration of the settlement established by Christopher Columbus at Isabela, in the Dominican Republic. The investigation of this site was recommended by the Inter-American Scientific Association in accordance with Resolution XX of the Second Inter-American Caribbean Meeting. As a result of this official request Mr. Krieger was detailed to participate, and he spent the month of May in conferences in Habana, Cuba, and the Dominican Republic and on field surveys of this historical site, important to Spanish-American colonial history.

Physical anthropology.—The curator, Dr. T. Dale Stewart, undertook two main research projects during the year. The first of these involved the reconstruction of the Melbourne skull from Florida, which, on the basis of paleontological evidence, is believed to be of considerable antiquity. Because this is one of the few human skulls recovered from an early period, a correct restoration is important. When the work of restoration was well advanced it became necessary to secure for comparative purposes the so-called Vero skull, also from Florida, which is believed to be of comparable age. This was obtained on loan from the Geological Survey of Florida. The reconstruction and description of these specimens may result in some changes in the opinions earlier expressed regarding their antiquity. A second project concerned the repair and examination of the skeletal material that the curator excavated in 1941–42 from an Indian ossuary on Potomac Creek, in Virginia, this being the first ossuary in this region to be carefully excavated by a physical anthropologist. The curator's aim was to show how much information could be obtained from these ossuaries.

As mentioned in the introduction, the curator worked in the Museo Nacional de Antropología during his sojourn in Mexico. He also visited museums in the cities of Morelia, Pátzcuaro, and Puebla. Mexico is developing a system of regional museums, some of which are historical in character, whereas others are devoted largely to anthropological subjects.

Agents of the Federal Bureau of Investigation submitted skeletal material for identification oftener this year than heretofore. They were very appreciative of the information and identifications that resulted from these examinations, which represent a service we are well equipped to render.

Among those who used the division library during the year may be mentioned Miss Katherine Simmons, United States Department of Agriculture, and M. Lonie, United States Bureau of Standards, both of whom were assembling measurements for the standardization of clothing.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

For the use of other museums, schools, and research organizations, both in this and other countries, 232 items were distributed. These included 72 specimens sent out as gifts from the division of archeology to the Instituto de Antropología e Historia, Mexico City, the Pettis County Historical Society, Sedalia, Mo., the Ocmulgee National Monument, Macon, Ga., the Florida State Geological Survey at Tallahassee, and the Florida State Museum at Gainesville. The division of ethnology made three gifts and transfers, with a total of 160 specimens, to various oganizations and governmental agencies. Several uncataloged and miscellaneous specimens were distributed by the division of physical anthropology.

NUMBER OF SPECIMENS UNDER DEPARTMENT

At the close of the fiscal year the department of anthropology had a total of 719,333 cataloged specimens, representing a net increase of 7,416. The following summary indicates the distribution of specimens as assigned to the various divisions and sections within the department:

Archeology	486, 887
Ethnology	182, 810
Ceramics	7, 585
Musical instruments	2, 414
Period art and textiles	2, 429
Physical anthropology	37, 208
Total	719, 333

DEPARTMENT OF BIOLOGY

(WALDO L. SCHMITT, *Head Curator*)

THE routine care of collections and requests for information and the identification of specimens occupied the greater part of the time of the limited staff of the several divisions in biology. Only in the division of fishes, where some extra help was available, was any appreciable attack made on the department's ever-growing backlog of unprocessed study material. There was time for little more than only the most necessary research—that required for the proper classification of the Museum's collections or needed to further the work of the sanitary, medical, and research units of the armed services.

Field work was restricted because of the war. Under the auspices of the Division of Cultural Cooperation of the State Department, Dr. E. A. Chapin, curator of insects, visited Chile from February to April.

Except for the continuance of the ornithological reconnaissance of Colombia by M. A. Carriker, Jr., financed by the W. L. Abbott fund, only more or less local collections were undertaken. The curator and associate curator of fishes collected fossils at Scientists Cliffs, on Chesapeake Bay, and fishes from various creeks in the State of Maryland. Several of the insect specialists made extensive, largely local, collections within their own groups, about 3,000 specimens being added through these efforts, a number being forms new to the collections, especially in the case of coleopterous larvae and the Aleyrodidae. Most of the aleyrodid material was obtained by Miss Louise M. Russell from preserved plant material at the National Herbarium and in the herbarium of the New York Botanical Gardens.

The curator and assistant curator of mollusks devoted some time to field trips undertaken for the purpose of acquainting members of the staffs of the National Naval Medical Center, Naval Medical School, and the National Institute of Health with the habitat of certain fresh-water mollusks that might serve as intermediate hosts of schistosomes and other trematode worms. The associate curator in charge of the diatom collection devoted two months last summer to field work at and in the vicinity of the Chesapeake Biological Laboratory investigating the subject of oyster food and fattening and related problems of diatom ecology sponsored by the Maryland Board of Natural Resources.

ACCESSIONS

Accessions for the year aggregated 1,135, an increase of nearly 50 percent over last year. There was, on the other hand, a slight recession in the number of specimens received, 197,462 as compared with 229,546 for 1944. Of particular importance in connection with the prosecution of the war and the maintenance of public health are the specimens of mammals, mollusks, and insects involved in the transmission of disease received for identification from the services concerned with sanitation and epidemiology in the armed forces as well as those received from the United States of America Typhus Commission and the Pan American Sanitary Bureau.

Mammals.—The total of the year's mammalian accessions received through the National Naval Medical School, 18 accessions in all, comprises 455 rodents, 54 bats, 29 cuscus and 23 other marsupials, 3 pigs, and 1 dingo from the Indo-Pacific, including species heretofore unrepresented in the collections from Australia and the Philippines, and 1 bat from Natal, Brazil; through the Army Medical Museum 18 accessions, covering 92 rats and other rodents, 24 bats, 3 bandicoots, and 1 shrew; from the United States of America Typhus Commission 6 accessions of 63 mammals; and from the Pan American Sanitary Bureau, 2 accessions of 23 rats and guinea-pigs; from Drs. A. Wetmore and J. P. E. Morrison 76 mammals collected for the Museum in the Republic of Panama.

Birds.—The largest of the year's 87 accessions comprised 584 skins, 1 alcoholic specimen, and 2 skeletons from Panama collected for the Museum by Drs. A. Wetmore and J. P. E. Morrison. Other large collections from areas from which we possessed little or no material include 354 skins and 1 skeleton from Ceylon taken by S. Dillon Ripley, and 143 bird skins and 7 skeletons by H. G. Deignan from the same island. The first and only material in the Museum from the Admiralty Islands, 95 bird skins, were donated by the collector, Lt. Logan J. Bennett, who also obtained 45 other skins from Nissan Island, Solomons, from which the Museum likewise had not previously had material. Included in a gift of eight specimens of Venezulean birds from William H. Phelps were seven species and a genus, *Cercibis*, new to the collections. The type of a new blackbird subspecies, *Agelaius xanthomus monensis*, from Puerto Rico was received from its describer, Señor Ventura Barnés, Jr. Sixty-two skins from extreme eastern Brazil, including several forms new to the collection, were received as a gift from Donald W. Lamm. Eight specimens, all new to the collection, were received from the Museum of Vertebrate Zoology, of the University of California, as a permanent deposit.

Reptiles and amphibians.—In the Pearl Islands, Panama, Drs. A. Wetmore and J. P. E. Morrison collected 347 specimens for the

Museum. By exchange 142 specimens, representing 81 forms new to the collections and including paratypes and cotypes of 22 species, were obtained from the Museum of Comparative Zoology. Anthony Curtiss continued his generous donations of Haitian material, amounting to 212 specimens this year. Other notable gifts included 324 specimens from New Guinea collected by William H. Stickel; 100 specimens from Sierra Leone, Trinidad, Virgin Islands, and other localities collected by Lt. Murray L. Johnson; 97 specimens from Ceylon by H. G. Deignan. Four accessions, representing 693 specimens from the Indo-Pacific area, were received as transfers from the National Naval Medical School.

Fishes.—Noteworthy among the accessions of ichthyological material was a bramble shark, washed ashore on the California coast, received from the California State Fisheries Laboratory, as far as known the only specimen extant in any North American museum. Exchanges brought many other valuable specimens to the collection, including 12 paratypes of Venezuelan fishes from the Natural History Museum, Stanford University, 24 paratypes and cotypes, mostly South American, from the Museum of Comparative Zoology, 4 paratypes and 30 other specimens from the California Academy of Sciences, and 1 paratype of *Emmelichthyops atlanticus*, from the Bingham Oceanographic Laboratory of Yale University. Fifty-eight Cuban fishes, including 43 paratypes, were received as a gift from Luis René Rivas. The largest single collection of the year comprised 1,180 specimens collected for the Museum chiefly in the Pearl Islands, Panama, by Drs. A. Wetmore and J. P. E. Morrison.

Insects.—Most important among the year's 257 accessions is the large quantity of mosquito material from various units of the Army and Navy, which has added a considerable number of species to our already excellent collection in this group. Other valuable mosquito material was received from the Rockefeller Foundation. The outstanding accession for the year, aside from the mosquitoes, is the Dayton Stoner collection of the Scutelleroidea, a highly specialized collection contained in about 70 schmitt boxes, accompanied by a considerable series of Coleoptera and other insects. Other accessions of importance include the gift of 201 Coccinellidae and Cleridae received from Ramón Gutiérrez A.; 122 Coccinellidae and Cleridae from P. Guillermo Kuschel; about 3,000 specimens of all orders, from the Pearl Islands, collected for the Museum by Drs. A. Wetmore and J. P. E. Morrison; about 1,500 specimens collected by the curator during his recent trip to Chile; and 311 sphecoid wasps, including 29 types, donated by Dr. H. T. Fernald. As in former years, the largest single accession, 72,000 insects, was received by transfer from the Department of Agriculture.

Marine invertebrates.—Six of the year's accessions brought type material to the collections. From Dr. W. Templeman were received the type and cotype of a new genus and species of parasitic copepod found on a lobster; from Dr. Rendell Rhoades, cotypes of a new species of crayfish; from Drs. Wilbur M. Tidd and Ralph V. Bangham, holotype of one new species of parasitic copepod and holotype and paratypes of another; from Dr. Horton H. Hobbs, Jr., types and paratypes of two new species of crayfish; from Dr. E. G. Reinhard, cotypes of a parasitic isopod; from the Miller School of Biology, University of Virginia, type of a new species of turbellarian worm; from Drs. A. Wetmore and J. P. E. Morrison a large collection of marine invertebrates from the Pearl Islands, Panama.

Mollusks.—Types of 11 species of mollusks in five accessions were presented to the Museum during the year, namely, 4 by John Q. Burch, 3 by A. R. V. Arellano, together with 24 other land shells, 3 paratypes of one species by the late George Willett, 1 by James Zetek, together with 200 specimens of shipworms, and 2 by Miss Marie E. Bourgeois, included in a shipment of 228 Mexican mollusks. From Miss Bourgeois the Museum received two other accessions comprising 66 specimens of land, fresh-water, and marine shells; Dr. Zetek in another accession donated 385 land shells from Panama. The year's largest accession, 25,000 mollusks, was collected for the Museum by Drs. A. Wetmore and J. P. E. Morrison in the Pearl Islands, Panama. In eight accessions from the National Naval Medical School, 631 shells were received from the Pacific area. In addition, 2,894 shells were received from various Pacific localities in 17 accessions from 13 members of the armed services.

Helminths.—With the exception of two accessions comprising 99 helminths from the Pearl Islands, Panama, collected for the Museum by Drs. A. Wetmore and J. P. E. Morrison, and 13 specimens collected by Capt. M. C. Meyer in New Guinea, the other nine accessions for the year contained paratype and cotype material of 10 new forms.

Corals.—Five accessions, totaling 34 specimens, were received from five members of the armed forces serving in the Pacific area.

Echinoderms.—Three of 27 accessions contained specimens of more than passing interest. Among the echinoderms from the Pearl Islands collected by Drs. A. Wetmore and J. P. E. Morrison were found two undescribed species. A specimen of starfish, *Linckia rosenbergi*, not seen since originally described in 1866, was donated by Ensign R. E. Lando, who collected it in the South Pacific; and 85 specimens from Biak Island, the first echinoderms ever received from that part of the world, were collected and donated by Corporals Frederick M. Bayer and Gilbert Neurohr.

Plants.—There were many important accessions among the 283 recorded for the year in the division of plants. Perhaps the most important was the set of 8,000 photographs of types in European herbaria obtained by purchase from the Chicago Natural History Museum, exceptionally valuable material since the great majority are of specimens in the Berlin Herbarium. Other very important accessions included 2,400 specimens of plants from Colombia, collected in the spring of 1944 by E. P. Killip, associate curator; 1,403 specimens, transferred from the U. S. Department of Agriculture, of which 1,360 are specimens collected in northern Brazil by J. T. Baldwin; 1,320 specimens collected in Colombia by the donor, Oscar L. Haught; 111 specimens and 299 photographs largely of type material of *Crepis* and related genera, presented by Prof. E. B. Babcock; 625 plants, mostly trees, collected in Ecuador by Elbert L. Little, Jr., and received as a transfer from the U. S. Forest Service; 454 specimens from Venezuela, received from Dr. H. Pittier; 576 specimens from Mexico, presented by Prof. P. Lyonnet; 495 specimens from Texas, received from the Bureau of Entomology and Plant Quarantine; 250 specimens from Cuba, donated by Brother Léon; 297 specimens from Martinique and Guadeloupe, presented by Dr. H. Stehlé; 172 specimens of ferns, mostly from the Pacific Islands, presented by Lt. (jg) W. H. Wagner, Jr.; and 291 specimens of grasses from various regions, presented by Mrs. Agnes Chase, custodian of grasses.

In continuation of exchanges, the National Herbarium also received 830 specimens from the Comisión de Botánica, Cali, Colombia; 497 specimens from the Instituto de Ciencias Naturales, Bogotá, Colombia; 1,607 specimens of plants from various sources from the University of Michigan; 800 specimens, mainly from Mexico and the western United States, from the California Academy of Sciences; 44 specimens of plants from Colombia, including many isotypes, from the Escuela Superior de Agricultura Tropical, Cali, Colombia; 595 specimens from several sources, from the Arnold Arboretum; 638 specimens, mostly from the western United States, from the New York Botanical Garden; 525 specimens of grasses from the western United States, received from Dr. Frank W. Gould, in continuation of exchanges; 339 specimens, mostly from California and Oregon, from the University of California; 200 specimens, mostly from Canada, from the Gray Herbarium, Harvard University; 286 specimens, mostly from Texas, from the University of Texas; and 193 specimens of Indiana grasses from Butler University.

Diatoms.— Interesting diatom material was received from two remote places: 10 samples from various deposits at Oamaru, New Zealand, donated by Fred Reed, of Christchurch, and 2 samples of planktonic species from the vicinity of Attu Island, Alaska, collected by Dr. A. Bajkov.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Two years ago the removal of the types from all biological collections in the Museum to safer storage elsewhere as a defense measure was reported as virtually complete. All these types have now been safely returned to the building, and their restoration to their respective study series in the several divisions in turn is virtually completed.

Exhibition series.—A most striking improvement in the North American mammal hall was accomplished this year. Following the shifting of certain large cases and the removal of duplicated exhibits, the taxidermist force, under the direction of W. L. Brown, chief taxidermist, completed the overhaul and refurbishing of the hair-seal exhibit. With the addition of a 35-foot-long background of rock work and other suitable accessories and the cleaning, repairing, and restoring of the original color in the 11 specimens, this exhibit has become much more attractive and correspondingly more instructive. New exhibits enhancing the several bird ranges in which they have been placed are those illustrating courtship in birds, unusual bird nests, the extinct New World birds, and the infinite variety of the colors of hummingbirds. These several exhibits are in the modern style and are all fluorescent-lighted. Nine individual animals and two small groups, green frog and scaled salamander, were added to the exhibition series. The District of Colombia mammals on exhibition and the cases in which they are contained were all cleaned, and nine birds were added to the District avifauna display.

Mammals.—Inability to obtain requisitioned storage cases seriously taxed the existing storage facilities in the division. The storage of incoming large and small skulls presents a more difficult situation each year. Many of the present cases are crowded to capacity. Only limited space is left in the division for the intercalation of new cases. Shelf space in the alcoholic storage has been at a premium for some time. Some relief came with the construction of temporary wooden shelves for the reception of the large collection of mammalian brains assembled by the late Dr. Aleš Hrdlička. Additional stacks of steel shelving should be constructed in the gallery of the alcoholic room, where there is yet space for them. Work on the collection of large skulls and skeletons in the attic is at a standstill, and little progress can be made until the portion of the collection removed to the second floor as a defense measure can be recombined with the collections remaining in the attic.

Birds.—The rearrangement, reidentification, and labeling of the study series of bird skins consumed a large amount of time of the curator and the scientific aide. All in all, the contents of 114 quarter-unit cases and 50 half-unit cases were rearranged and reidentified. The collection of type specimens also was rearranged and expanded.

The physical condition of the collection is as good as the crowded condition of the cases permits.

On May 1 arrangements were completed for merging the Museum and the Fish and Wildlife Service ornithological collections. Though the two collections have not yet been actually combined, steps are being taken to put the merger into effect.

Reptiles and amphibians.—The very crowded condition of the alcoholic herpetological collections calls for definite action on the matter of finding some suitable storage for the extensive series of alcoholic birds occupying 177 shelves in the reptile stack.

A complete check of the type collection was made at the time of the return of the types to the Museum. Several errors in the records were detected and corrected.

Fishes.—The alcoholic collections of fishes are much overcrowded, a condition requiring an unusually large amount of rearranging in order to make place for newly cataloged specimens in the study series. The joint efforts of the temporary cataloger and the scientific aide attached to the division resulted in 4,843 catalog entries for the year, mostly for fishes of the *Albatross*-Philippine collections of 1907–10. The collections continue in good physical shape and are being improved by the elimination of all wooden barrels, which are being replaced by earthenware crocks as rapidly as they can be obtained. Unless more floor space can be provided, little can be done to alleviate the present crowded condition of the stack.

Insects.—As a result of the combined efforts of all members of the curatorial and custodial staff of the Museum and the division of insect identification of the Bureau of Entomology and Plant Quarantine, the study collections as a whole are in good physical shape, but little time has been available for urgently needed rearrangements. No change has been made in the installation of the collections, and there is still a considerable backlog of unavailable material, the reduction of which is dependent upon an increase in the staff. The return of the types to the Museum has facilitated the daily work of identification, but there has not yet been time to isolate them in individual trays except in two or three of the insect groups. Despite all handicaps, the great volume of service work, and a reduced staff, improvements were affected in many collections and progress was made in the incorporation of both old and new material. Much more would have been accomplished but for obstacles resulting from the inadequacy of space and from the lack of equipment and supplies.

The curator, Dr. E. A. Chapin, rearranged the material of the family Melandryidae and nearly completed the rearrangement of the scarabaeid subfamily Cetoniinae. Some rearrangement incidental to the making of identifications was made in the Coccinellidae group. The associate curator, W. E. Hoffmann, arranged the collection of

Oriental Pentatomidae and Scutelleridae to genera and then began the task of making the specific determinations. It was necessary to spread some of the material and in some cases to remount it in order to make critical studies.

No major progress was made in the rearrangement of the Orthoptera and Neuroptera groups, but gross sorting was kept up to date by Dr. H. K. Townes, who also incorporated the valuable R. C. Smith collection of Neuroptera in the study series. All the Nearctic Trichoptera were sent to Herbert H. Ross and the Corrodentia belonging to the genus *Lachesilla* to Kathryn Sommerman, both of the Illinois Natural History Survey, for study and identification.

The rearrangement of the larval Coleoptera collections of Elateridae was completed and included the incorporation of material received from Robert Glen, of the Canadian Department of Agriculture, who used it as a partial basis for a large paper on elaterid larvae now awaiting publication by the Museum. Parts of the Anthribidae also were sorted, identified, and arranged in accordance with the findings of W. H. Anderson. In the collections of adult Coleoptera there were no large-scale rearrangements, although rather large quantities of new material were incorporated. This material represents the equivalent of about 50 schmitt boxes of specimens and resulted from the "special survey" conducted by the Bureau's division of foreign plant quarantines, involving areas in the vicinity of ports of entry. On the whole, the collections of Coleoptera are in good physical condition. They are still far from satisfactory, however, with respect to completeness, accuracy of identifications, and availability for reference use. Large quantities of material in schmitt boxes and old cork-lined drawers still remain to be sorted, identified, and incorporated in the regular collection.

In the section of Lepidoptera Dr. Harrison M. Tietz, of Pennsylvania State College, was again employed for three months by the Bureau in the division of insects to continue his work of incorporating and arranging in one unit the North American Phalaenidae of the Barnes, Blackmore, Engelhardt, Brooklyn Museum, Schoenfeld, and old United States National Museum collections. He succeeded in incorporating and arranging the material of four subfamilies in conformity with the latest accepted classification. Until more standard drawers can be provided, Dr. Tietz will have to use the empty drawers of the Barnes collection as temporary storage for the arranged material. Although this is the best that can be done under the circumstances, it is a very unsatisfactory arrangement, since these collections will have to be moved again when standard drawers are again available. The alcoholic larval collection of Phalaenidae was also rearranged and labeled to conform with the latest classification. The special survey of the division of foreign plant quarantines contributed

a large quantity of interesting and important reared Lepidoptera, which has been identified and placed in the regular collection.

In the course of the year's work on the Hemiptera collections, Dr. R. I. Sailer rearranged, determined, or incorporated from various other collections some 14,000 specimens. Probably the most important single improvement, making the collection infinitely more usable for reference purposes, was the establishment of an arranged collection of Neotropical Miridae. In the Homoptera J. C. Caldwell rearranged and incorporated over 8,000 specimens. In spite of this volume of work, the collection of leafhoppers and allied groups is in a discouraging condition because, except for the family Cercopidae, the volume of unincorporated and unidentified material is almost equal to that in the arranged and identified collection. In the family Psyllidae excellent progress was made. Miss Louise M. Russell completely rearranged this family during the fiscal year, incorporated in the Museum series the Crawford, Baker, Ball, McAtee, Morrison, Compere, and Koebele collections. Approximately six months were spent in transferring and identifying this material and adding donor labels wherever necessary. The psyllid collection can now be said to be in good shape, and, though little time could be given to the aleyrodid collection, it is in fair condition. As the aphid collection was reorganized and expanded last year, no further extensive curatorial work was necessary. However, a large volume of material, particularly aphids, received from the special survey activity of the Bureau, was incorporated. The aphid collection is one of the few that can be considered in very good condition. It even includes provision for anticipated expansion during the next several years.

Some definite improvement has been made in the Muscoidea of the Diptera collections in two tribes of the parasitic flies comprising the family Larvaevoridae. The tribe Leskiini was studied by Dr. M. T. James, who completely reidentified and reorganized the Museum collection of these forms. A. R. Brooks, of the Canadian Department of Agriculture, studied, identified, and reorganized the tribe Phasiini, the rather considerable material of which in the National collection was sent to Ottawa for his attention. During the fiscal year most of the collection of dipterous larvae was transferred to standard vials in standard jars for more satisfactory arrangement and preservation, and the individual vials, as well as the jars and racks, were fully labeled. Two-thirds of this task has been completed, but its consummation will have to await additional subprofessional assistance. The most extensive and important work of the year involving the Diptera collections concerned the mosquitoes. The mosquito collection under Dr. Alan Stone has grown immensely, particularly in species of the Oriental and Australian regions. About 60 species were added which were not previously represented, and the mosquito collection is now undoubtedly one of the best in exist-

ence. It has required one full-time subprofessional worker to mount, label, and store the large quantities of incoming material. Very little rearrangement has been necessary in the case of the collection of adults, but the alcoholic collection, containing larvae and pupae, has been greatly expanded and has been reorganized. Another accomplishment of Dr. Stone's unit has been the expansion of the type collection of mosquitoes so that each type specimen is in a separate labeled tray. The trays are arranged according to family and author and alphabetically under the author by the original combinations. This collection of types now occupies a total of 21 drawers. The associated slide collection is similarly arranged, with the slides filed flat.

In the Hymenoptera, following the retirement of R. A. Cushman and the appointment of Dr. H. K. Townes to his position, rather extensive rearrangement of the collections of Ichneumonoidea and Serphoidea was undertaken. The Braconidae, the Aphidiinae, and the Cheloniinae were reorganized to permit more effective reference use, and the entire collection of Ichneumonidae was rearranged to conform with the classification given in Dr. Townes's recently published catalog of this family. In the Chalcidoidea, the subfamily Cerocephalinae of the family Pteromalidae was completely reidentified and rearranged in accordance with a revision of the group prepared by A. B. Gahan. A great deal of miscellaneous, unsorted material of all the groups of parasitic Hymenoptera was sorted and incorporated in the regular collections, approximately 100 drawers and 220 schmitt boxes of specimens. About 85 drawers and 450 schmitt boxes still await identification and incorporation. The holotypes of the Ichneumonoidea, except the Braconidae, were transferred to individual trays with the original name and author pasted on each tray. These now occupy 15 drawers. In spite of the lack of a regular worker on the bees and wasps, some improvements in that part of the Hymenoptera collections were accomplished with the assistance of outside investigators. R. M. Bohart redetermined and rearranged the contents of 20 drawers of Vespidae, and P. H. Timberlake worked over 6 drawers of bees belonging to the family Panurgidae. Dr. M. R. Smith reports complete rearrangement of the ants of the subfamily Dolichoderinae and the tribes Attini and Dacetoni, and the incorporation of the excellent collection of identified ants belonging to the genus *Atta* received from C. R. Gonçalvos, of Rio de Janeiro, Brazil. Although on the whole the collections of parasitic Hymenoptera are comparatively well housed at present, this is definitely not true for the aculeate Hymenoptera, including the ants. At least 60 percent more space is urgently required for the collection of bees, wasps, and ants. The general organization of the Thysanoptera collection, under the care of J. C. Crawford, is good; new material has been incorporated as received.

During the fiscal year Grace E. Glance was appointed to a specialist position with responsibility for identifications and research in the Collembola, Thysanura, and Entrophi. Since assuming charge Miss Glance has sorted, labeled, and arranged the recent material, which is being used as a base for the development of the collections. To this has been added a considerable quantity of material from the old collections, but more than half of the older material still remains to be studied, reidentified, and incorporated. Every opportunity should be used to obtain material in these groups by gift or exchange, as they have been long neglected, with the result that the collections are weak and most of the material poor. It is proposed to have Miss Glance spend some time in Montana after the war in order that she may study the Mills and Folsom collections at Bozeman. Dr. Mills, who has been very cooperative, has indicated that he would be prepared to turn over for the National collection at that time representatives of many Collembola not now contained in it. Meanwhile, every specimen of Collembola, Thysanura, and Entotrophi received for identification that is in even reasonably good condition will be retained.

During the year Dr. E. W. Baker was appointed as a second specialist in the section of ectoparasites and Acarina, with responsibility for the free-living mites. He has assumed custodianship of the collection of these forms and has rearranged the material comprising 10 different families. A beginning was made also on the reorganization of the collection of the large group Oribatoidea. In addition, Dr. Baker undertook to enlarge the series of individual species, as the representation of many species has been too poor to permit the critical study required for revisionary work. An alcoholic collection is also being developed to supplement the slide collection. Many slide preparations are being remounted to take care of deterioration due to the mountant employed. E. A. McGregor, working at the Bureau's laboratory in Whittier, Calif., undertook to complete the revision of the spider mites, or Tetranychidae, on which he is the outstanding authority. Many hundreds of slides have been sent to him for review and reidentification. The collection, which has been in poor condition, will thereby be reorganized and brought up to date. Dr. H. E. Ewing rearranged the collection of Trombiculinae in conformity with a generic revision of the group published during the year. The collection of Anoplura is in good order and is arranged in accordance with modern ideas of the classification of the group; but that of the Mallophaga is in need of complete overhauling. In order that the great deal of Mallophaga material received for identification may be handled more expeditiously and may be more accurately identified in the future, E. W. Stafford, of Mississippi State College, was given a 3-month appointment for rearranging and reidentifying this collection. On the whole the collection of fleas is well arranged, with

nearly every specimen identified. Larger series, however, are needed for many of the forms.

Marine invertebrates.—The physical condition of the collections continues good.. The necessary routine records are up to date, having been carried along by the head curator's secretary, Miss Lucile McCain. At the present time, the type collections returned from storage out of the building are being checked and relabeled where necessary. This is the first time that a complete inventory of the series of types has been undertaken. Library work in this division occupied a considerable part of the time of the temporary typist assigned to the head curator's office, but a great deal more remains to be done. There were no changes in the exhibits except for the removal of two small cases of duplicate sponges.

Mollusks.—The mollusk collections continue in good order, but quarter-unit cases are needed for the redistribution of types returned from storage during the year.

Helminths, corals, and echinoderms.—There were no changes in these collections during the year except for the incorporation of new material in the helminth collection by the staff of the zoological division of the Bureau of Animal Industry.

Plants.—During the year 14,346 specimens of flowering plants and ferns were mounted, wholly by adhesive straps. In addition, 3,657 photographs of type specimens were mounted for incorporation in the herbarium, 4,740 mounted herbarium specimens were repaired, and 5,314 typed or printed descriptions (with reference labels) were mounted on herbarium sheets. During the year 14,051 mounted specimens were stamped and recorded and thus made ready for the herbarium; about 1,000 are still unstamped. Of material awaiting mounting there is a backlog of about 31,000 specimens, approximately the number mentioned a year ago as unmounted. There are, besides, about 4,500 photographs of type specimens in European herbaria that should be mounted and added to the herbarium as promptly as possible. Sixty-five thousand mounted, stamped, and recorded specimens and sheets bearing mounted photographs or descriptions are on hand awaiting incorporation in the herbarium. Nearly all are American, about 5,000 being West Indian and the remainder continental.

In incorporating United States, Mexican, and Central American specimens in the herbarium during the year, C. V. Morton spent two months in rearranging the Compositae, and in the course of this work he identified several hundred specimens in that and other families. Ellsworth P. Killip likewise incorporated a great deal of South American material, this mainly in connection with identification work upon recent large collections. Lack of cases delayed the insertion of this material in the herbarium. Furthermore, the time that could be devoted to this work was greatly limited because of the pressure of other routine.

Mrs. Agnes Chase continued to serve as custodian of grasses and devoted her time almost wholly to the maintenance of this collection and its special library and to the identification of a wide array of material from many regions, especially the southwest Pacific. There was a steady influx of desirable material, much of which still awaits mounting. During the year 14 new herbarium cases of standard size were installed under the immediate charge of Dr. F. A. McClure, research associate, who is now engaged under the auspices of the Department of Agriculture in an extended study of the American species of bamboos.

The type herbarium, the specimens of which were tightly packed for wartime storage, has now been entirely rearranged by Mr. Morton. It consists of 44,394 specimens, 784 additional types having been segregated during the year, and is contained in 120 small unit cases of eight pigeonholes each.

As in other years, Mr. Leonard gave general attention to the lower cryptogams, devoting about one day a week to processing recent and accumulated collections (mostly mosses and lichens) and distributing identified specimens into the herbarium. John A. Stevenson, honorary curator of the C. G. Lloyd mycological collections, in reporting upon their basic utility in taxonomic work, makes special mention of the Xylariaceae, Tylostomaceae, and tropical Polyporaceae, the last group directly concerned with timber decay.

In April the sectional library was placed in immediate charge of Dr. E. H. Walker. The shelves have now been completely rearranged, permitting far readier access to the books and a very advantageous new disposition of table space for study purposes. Much work was done in rearranging and cataloging the books; also the reprint series was renovated and made more useful. More volumes than usual were bound, and in general the library is greatly improved.

Taxidermist shop.—In addition to the improvements in the public exhibits already noted, the taxidermists performed a great deal of work in planning better future exhibits and in preparing study material, skins, and skeletons for the mammal, bird, and reptile divisions. Miniature models were made of four animals for the Firestone Liberian group and of five groups intended for the North American hall. Forty-three animals were mounted for the exhibition series, as well as a celluloid replica of a 25-foot reticulated python. Skins made up, remade, repaired, degreased, or dismounted, including animals skinned, totaled: Mammals, 180; birds, 520. Skeletons, as well as individual skulls and sets of leg bones, other than those accompanying complete skeletons, attended to during the year included 721 mammals and 92 birds; nine eggs were blown. Of 170 requisitions submitted by the curators of the department for taxidermist services, all but 24 were completed.

INVESTIGATION AND RESEARCH

Mammals.—The curator of mammals, Dr. Remington Kellogg, prepared, for the use of investigators working for the Board for the Coordination of Malarial Studies, a check list with keys for macaque monkeys, which was published in the National Research Council report on primate malaria. He also published two papers on rodents from the South Pacific, a description of a macaque from Borneo, an account of the fossil cetaceans from the Florida Tertiary, and in joint authorship with E. A. Goldman a review of the spider monkeys. The associate curator, Raymond H. Gilmore, completed the identification of approximately 30,000 bone fragments, obtained during the course of field investigations by a number of American archeologists working in various parts of this country and Mexico, and also identified about 50 Siamese and a number of Bolivian and Peruvian mammals transferred from the Office of the Coordinator of Inter-American Affairs and the Pan American Sanitary Bureau. Gerrit S. Miller, Jr., research associate, continued work on a revised edition of his list of "North American Recent Mammals." H. Harold Shamel, scientific aide, made a study of the rats belonging to the *Rattus rattus* group and completed a brief synopsis of the bats of the genus *Eptesicus* of the Western Hemisphere, including the description of a new form from Jamaica.

Birds.—The curator of birds, Dr. Herbert Friedmann, completed a report on the extensive collection of birds made by E. G. Holt on the upper Rio Negro, Brazil, and the Upper Orinoco, in southern Venezuela, and, in this connection, published two papers and wrote two others now in press describing new forms. Work was continued on the manuscript of the twelfth volume of "The Birds of North and Middle America," and the manuscript of volume 11, dealing with the falconiform birds was brought up to date. Some time was spent on the fifth edition of the "Check-list of North American Birds" and on the "Check List of Birds of Mexico" being prepared by R. T. Moore, L. Griscom, and the curator. He also published several papers on Antarctic and American birds. The associate curator, H. G. Deignan, began work on a check list of the birds of Siam and on a critical catalog of the bird types in the Museum collection. The assistant curator, S. D. Ripley, though absent from the Museum on war work, published two papers, one of the birds of the West Sumatran Islands and one on the golden oriole in Ceylon, and completed three others dealing with barbets, nightjars, and the use of certain terms in speciation studies. Dr. Wetmore devoted some time to the A. O. U. "Check-list of North American Birds" and supplements and worked on the collection of birds from the Pearl Islands, Bay of Panama. He also worked on birds from Tabasco, Mexico, and published on a few unusual records, such as that of a golden plover in Nicaragua and a blue-winged teal on the high seas. Dr. E. M. Hasbrouck, volunteer

worker in the division, published a paper on the status of Barrow's goldeneye in eastern North America.

Reptiles and amphibians.—The associate curator, Dr. Doris M. Cochran, completed a paper on the reptiles and amphibians of the Pearl Islands, Panama, based on the collections made by Drs. A. Wetmore and J. P. E. Morrison, and completed notes on a collection of frogs borrowed from Instituto Butantan, drawing and describing several species not represented in North American collections.

Fishes.—Nine papers by the curator of fishes, Dr. Leonard P. Schultz, were published during the year, and the final report on the Venezuelan fishes collected by him in 1942 and those collected by the U. S. S. *Niagara* in 1924–25 is nearly completed; other studies completed deal with the carangid fishes of the genus *Oligoplites* inhabiting American waters, a revision of the genera of mullets, fishes of the family Mugilidae, and a revision of the genera of atherine fishes with descriptions of two new species and four new genera. The associate curator, Dr. Robert R. Miller, published two papers during the year and submitted four others for publication. At the end of the year he was engaged in studying certain collections from Mexican streams and caves, the cyprinids of Californian waters and southwestern Nevada, and the fish fauna of the District of Columbia. The scientific aide, Earl D. Reid, published one paper on two rare fishes from off the Virginia capes.

Insects.—The curator of insects, Dr. E. A. Chapin, devoted his available research time to the family Coccinellidae, with special reference to the Neotropical species, and continued his revision of the genus *Hippodamia.*

The associate curator, W. E. Hoffmann, is revising the Scutelleroidea of the Oriental region. In the orthopterous insects Dr. H. K. Townes made some small advance in the generic classification of the Dermaptera.

Current work on the Coleoptera included W. S. Fisher's studies on the wood-infesting beetles of the families Bostrichidae and Anobiidae. In order to complete his paper on the Bostrichidae it will be necessary to study certain type material in other institutions. Dr. W. H. Anderson completed a key to the genera of Anthribidae, based on larval characters and with numerous illustrations. In addition, he prepared nearly 300 permanent slides from dissected specimens of adult Scolytidae in furtherance of studies on several of the genera. The most intensive research work in the Coleoptera concerned certain genera of Elateridae, in connection with which J. M. Valentine has made a serious study of *Drasterius* and allied genera; it is expected that this valuable revisionary work will be completed during the next fiscal year.

Part 3 of Blackwelder's "Checklist of the Coleopterous Insects of Mexico, Central America, the West Indies, and South America" was

published by the Museum during the year and the manuscript of Part 4 prepared.

In Lepidoptera, H. W. Capps was able to devote a little time to the further development of his detailed study of lepidopterous larvae. In connection with an economic problem involving the pyraustid genus *Leucinodes* which arose during the year, Mr. Capps also initiated a revisionary study of the species comprising that small group.

The assignment of R. I. Sailer to certain DDT studies in the field somewhat delayed his research on the Hemiptera-Heteroptera. Some progress was made on the revision of two genera of Pentatomidae, which contain important economic species, and on a revision of the bed-bug genus *Cimex*. Dr. J. S. Caldwell began a reclassification of the Cicadidae in the Homoptera and completed a rough key to the genera for testing in identification work. He also nearly completed a generic classification of the membracid tribe Ceresini, in which he depended to a large extent on characters of the genitalia, believing that a classification developed on this basis would be soundest from a phylogenetic standpoint. Since at least half of Miss Louise Russell's time during the fiscal year was devoted to the reorganization of the collection of the Psyllidae, she had little opportunity to extend her research studies in the Aleyrodidae. She was able to accomplish some work on the small genera *Aleuroparadoxus* and *Aleurotithius* and nearly completed a paper dealing with the known species. In the aphids, the large project of Dr. P. W. Mason involving a reclassification of the species of the genus *Macrosiphum* was continued. Emphasis during the past year was placed on a critical study of various closely related genera that will probably need to be covered by the treatment.

In the Diptera Dr. M. T. James completed a paper on "The Flies That Cause Myiasis in Man," which attempts to provide a means for identification of the many different forms involved in human myiasis, and a shorter paper revising the larvaevorid tribe Leskiini. He began a study of the Stratiomyidae of the Solomon Islands based largely on the collections of C. O. Berg.

A. B. Gahan, in the course of his Hymenoptera studies, completed a revision of the chalcidoid genus *Cerocephala* and related genera, as well as a provisional revision of the Encyrtidae comprising the genus *Pseudaphycus*, and has continued a classification of the supergeneric groups of Chalcidoidea. Most of Dr. M. R. Smith's research time was devoted to the preparation of a generic and subgeneric synopsis of the Nearctic ants based on the worker caste, now virtually completed except for illustrations. He also made a beginning on the development of a much-needed catalog of the Nearctic ants.

In the section of ectoparasites Dr. E. W. Baker undertook a study of certain groups of oribatid mites, containing forms of medical importance, since they serve as intermediate hosts of tapeworms. He completed one paper dealing with mites of the family Cunaxidae and

another on the trichadenid genus *Brevipalpus* with keys and descriptions for all known species. He has in rough draft a generic classification of the family Cheyletidae. Dr. H. E. Ewing continued his work with the chigger mites, a group upon which a great deal of attention has been focused during the war, particularly because of the significance of these species as vectors of human diseases, and published one paper dealing with the forms of most importance in that connection.

In the section of Isoptera Dr. T. E. Snyder, termite specialist of the Bureau's division of forest insect investigations, is devoting two days a week to the termite collections, giving special attention to the development of a catalog of the termites of the world projected many years ago, a joint undertaking with Dr. A. E. Emerson, of the University of Chicago.

Marine invertebrates.—The head curator of biology, Dr. Waldo L. Schmitt, compiled a chronology of the operations of the U. S. Fisheries steamer *Albatross* from the day of her launching to the day of her decommission, which was published in the *American Neptune* as an appendix to a brief historical account of the vessel by Joel W. Hedgpeth. He also prepared for publication reports on the miscellaneous lots of zoological material for the general report on the scientific results of the U. S. Antarctic Service Expedition. Two other manuscripts describing two new species of shrimps from South America and a rare crustacean from Africa are complete except for illustrations. Clarence R. Shoemaker, associate in zoology, continued his studies on the amphipod fauna of the western Atlantic and completed his study of the genus *Bactrurus*. His report on the amphipods of the U. S. Antarctic Service Expedition was published in April. Mrs. Mildred S. Wilson, assistant curator, who has been rearranging the collection of copepods, perhaps one of the most complete in any museum, began some studies of a number of rare forms and one new genus detected among the unidentified material. Dr. R. S. Bassler assisted Dr. Raymond C. Osburn's studies preliminary to a handbook of American Bryozoa with photographs of many new species that he had segregated from west coast material. Dr. J. A. Cushman continued studies of Foraminifera begun earlier in the war period and, in addition, completed several monographic studies of generic and subfamily groups. The type faunas of various geologic formations have also been studied and some of them published for use in correlations.

Mollusks.—The curator of mollusks, Dr. Paul Bartsch, continued his studies on the east Pacific turrid mollusks, and, in collaboration with Dr. Harald A. Rehder, associate curator, is working on a monograph on the wood-boring mollusks of the genus *Martesia* infesting the west Atlantic. His section on the mollusks of "Fishes and Shells of the Pacific World" for the New York Zoological Society is in process of being published. Dr. Rehder devoted considerable time to identifying mollusks received in large part from men in the armed services.

but he found time to prepare descriptions of several new species. The assistant curator, Dr. J. P. E. Morrison, as time permitted, worked on the collections obtained during his detail for work in the Pearl Islands from February to October 1944.

Echinoderms.—The curator, Austin H. Clark, reports that Part 4c of his "Monograph of the Existing Crinoids" has been very nearly completed except for the plates and that a preliminary report on the Ophiuroidea of the *Albatross* Hawaiian collections has been prepared. Papers dealing with the Onychophora of Panama and the Canal Zone and with the echinoderms collected by Drs. A. Wetmore and J. P. E. Morrison at the Pearl Islands, Bay of Panama, including a revision of the Pacific species of the echinoid genus *Encope*, were submitted for publication. Two other papers by the curator were published during the year.

Plants.—The curator of plants, Dr. William R. Maxon, published descriptions of several new ferns detected in the course of identifying various large tropical American collections. Ellsworth P. Killip continued his researches upon the flora of northern South America. Emery C. Leonard is continuing with the Acanthaceae of Colombia and, in collaboration with H. A. Allard, published a supplementary paper on the flora of the Bull Run Mountains, Va. C. V. Morton continued work upon his synoptical catalog of the vascular plants of Cuba, with keys, and published a critical review of the Mexican plants (exclusive of Compositae) described by the late Marcus E. Jones. Dr. E. H. Walker published a paper on the plants of the Aleutian Islands, designed especially for service men, and carried on studies on New World Myrsinaceae. Mrs. Agnes Chase, custodian of grasses, resumed her monographic study of Brazilian grasses, and Dr. F. A. McClure, research associate, continued his study of bamboos, mainly tropical American.

Diatoms.—The principal investigations carried on in the section of diatoms dealt with the diatom flora of Chesapeake Bay, the diatom content of oyster stomachs, and the diatoms of the Presidential Cruise. A method of marking rings on cover glasses was perfected and a study made of a better storage system for diatom collections.

IDENTIFICATION, DISTRIBUTION, AND EXCHANGE OF SPECIMENS

The number of lots of specimens sent in with requests for identification was as follows: Mammals, 68; birds, 43; reptiles and amphibians, 30; fishes, 34; insects, 142; marine invertebrates, 59; mollusks, 101; helminths, 6; corals, 2; echinoderms, 11; plants, 291; diatoms, 1; a total of 788, involving more than 20,000 specimens. Besides these, 30,184 lots of specimens were received by the division of insect identification, United States Department of Agriculture, which furnished 59,492 identifications. The total number of lots received by the Museum for identification represents a 30 percent increase over the

previous year. Each year there are a great number of requests for information other than identifications.

The total number of specimens from all sources identified during the year by all divisions approximated 30,000 (not including 57,825 identified by members of the staff of the division of insect identification, Bureau of Entomology and Plant Quarantine).

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions, governmental agencies, and private individuals aggregated 80 transactions, 3,053 specimens; 587 specimens were sent out in exchange, 853 as gifts, and 1,613 as transfers to military and naval centers. The 18,645 plants distributed were sent out as exchanges to 93 institutions and correspondents. In addition, 74 photographs were distributed as transfers.

NUMBER OF SPECIMENS UNDER THE DEPARTMENT

The summary of specimens given below is based on the numbers estimated for the previous fiscal year, with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time. No estimate has yet been made for the corals, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions lots consisting of minute organisms are frequently counted as single specimens, though they may contain hundreds and even thousands of individuals, the enumeration of which could serve no useful purpose. Processed specimens, such as plants mounted or diatoms mounted on slides during the year from duplicate and other material on hand, account for any unspecified increase in the annual totals of these groups.

Mammals		247,826
Birds:		
Skins	291,905	
Alcoholics	10,082	
Skeletons	18,251	
Eggs	90,439	
		410,677
Reptiles and amphibians		130,486
Fishes		1,304,651
Insects		5,640,199
Marine invertebrates		1,057,042
Mollusks		3,123,220
Helminths		35,093
Echinoderms		177,587
Plants		1,877,000
Diatoms:		
Slides	20,300	
Crude and prepared samples	25,031	
		45,331
Total		14,049,112

DEPARTMENT OF GEOLOGY

(R. S. Bassler, *Head Curator*)

Although the operation of the department continued difficult in the fiscal year 1945, the third year of global war, the care and preservation of the collections and, indeed, some reduction in the backlog progressed satisfactorily. The safe return to Washington of the type specimens evacuated in 1942, with restoration to their proper places in the Museum collections, was a heartfelt relief. Good progress was made on the several war projects that have been under way for the past three years, particularly the cooperative work with Mexico carried on by Dr. G. A. Cooper in paleontology and Dr. W. F. Foshag in economic geology.

An event of considerable importance to the division of invertebrate paleontology and paleobotany was the decision of the Director of the Geological Survey, upon invitation of the Secretary of the Smithsonian Institution, to transfer the large collection of Carboniferous and Permian fossils, hitherto located in the Interior Building, to the National Museum. This transfer will consolidate both the fossil collections and the paleontological staffs of the two institutions. A substantial portion of the Survey collection has already been moved to the Museum.

Progress was made in Dr. Cooper's study of the Paleozoic paleontology of Mexico, which yielded information that will be helpful in future location of ore deposits. With the help of several collaborators the project should be completed early in the next fiscal year. As a further part of this program, a 6-week visit from Ing. Albert Arellano, stratigrapher for the Geological Institute of Mexico, gave opportunity for closer collaboration with that country. Another visitor, under similar auspices, Dr. Y. Wang, of the National Geological Survey of China, came for a year's stay to learn American research methods and to study the faunas of Ordovician formations, well developed both in the United States and in China.

Wartime restrictions necessarily curtailed field work in vertebrate paleontology, but, offsetting this, more time became available to concentrate on preparatory work. The result was not only a considerable reduction in the backlog of unprepared specimens, but also the completion of several mounted skeletons of outstanding merit for the exhibition halls.

Two mineral collections, one from the classic Copper Queen mine at Bisbee, Ariz., and the other the T. Sterry Hunt collection, both ob-

tained from the estate of the late Dr. James Douglas, form a gift of exceptional merit to the division of mineralogy and petrology. The rock and mineral collections in general were consulted frequently by representatives of war agencies, and the staff continued to furnish information to military authorities and to soldiers in the various combat areas.

The temporary appointment for the first quarter of 1945 of Dr. J. Brookes Knight, of Princeton University, an authority on Paleozoic gastropods, to revise the Museum collection of this class, led to later arrangements whereby, through the Walcott bequest, he would continue his studies during the coming year.

Continuing on detail from the Museum, Dr. W. F. Foshag, curator of mineralogy and petrology, spent the year in furthering war work in Mexico by supervising surveys for strategic minerals. Dr. C. Lewis Gazin has been absent since July 20, 1942, on military detail in the service of the United States Army.

ACCESSIONS FOR THE YEAR

Study and exhibition materials received by the department during the year number 130 accessions and 23,770 specimens, in contrast with 123 accessions and 3,466 specimens during 1943–44, a noteworthy gain not only in amount but in quality. The figures for the individual divisions follow: Mineralogy and petrology, 70 accessions (868 specimens); invertebrate paleontology and paleobotany, 50 accessions (22,542 specimens); vertebrate paleontology, 10 accessions (360 specimens).

Mineralogy and petrology.—The income from the Canfield and Roebling funds was again instrumental in bringing valuable accessions to the mineral and gem collections. Four accessions credited to the Canfield fund during the past year contained the finest specimen so far recovered of the new mineral brazilianite, from near Arrasuahý, Brazil; 10 tantalite crystals from Ceará, Brazil; an excellent beryl crystal from Pala, Calif.; from Madagascar, a colorless glassy spodumene and, for the exhibition series of gems, a 25-carat clear yellow spodumene.

Through the Roebling fund 10 accessions were recorded, comprising principally gems and minerals. The minerals included 70 specimens of unusual calcite crystals with a new crystal habit from La Aurora mine, Chihuahua, Mexico; a specimen of natrolite from Livingston, Mont.; a 39-carat beryl from Wray mine, Yancey County, N. C.; and 2 specimens of quartz from Pacú, Minas Gerais, Brazil. Credited also to this fund was a series of 8 minerals from Mexico, consisting of 2 crystallized argentites (silver sulphide) from Guanajuato, 2 native silvers from Batopilas, one legrandite (zinc arsenate) from Coahuila, 1 aguilarite (silver sulphide and selenide) from Taxco, and 1 stephanite and 1 pyrargyrite (both silver antimony sulphides) from Zacatecas.

The more important additions to the gem collection obtained through the Roebling endowment were as follows: A 40-carat Ceylon cat's-eye chrysoberyl; a fine blue Ceylon sapphire of 9 carats; a white phenacite from Brazil, 9 carats; an attractive green diopside of 11 carats from Madagascar; and a series of 8 cabochon jades of various colors, all gems of rare exhibition quality and value. The gem collection was further enriched by a gift from Mr. and Mrs. Calvin Joyner of 16 different-colored jade rings and by an acquisition from the United States Customs Service of a series of 160 cut stones consisting of aquamarine, amethyst, opal, sapphire, garnet, zircon, and citrine quartz. A synthetic emerald of 90 points was presented by C. F. Chatham.

The mineral collections benefited by a number of outstanding specimens acquired as a result of the special efforts of the associate curator to interest persons possessing good minerals to deposit them in the National Museum. The most important accession comprised the Dr. James Douglas collection of copper minerals from Bisbee, Ariz., and the T. Sterry Hunt mineral collection. Before disposing of his general mineral collection, Burnham S. Colburn presented his more important and choice specimens of hiddenites, green spodumene, and cyanite. Likewise, a superb suite of 10 muscovite and biotite crystals was donated by S. P. Cronheim from his mine at Mitchell Creek, Upson County, Ga.

Dean Frasche continued his interest in our collections by depositing a series of chromite crystals from the Sierra Chrome Mines, Ltd., Sierra Leone, Africa. The American Museum of Natural History, through F. H. Pough, exchanged seven tourmalines, one fluorite, and one amblygonite from Brazil and a specimen each of emmonsite (iron tellurite) and a new mineral, mackayite (also an iron tellurite), from Nevada. Frank L. Hess, in continuance of his interest, donated a specimen of goldfieldite (a complex copper antimony bismuth sulphide and telluride) from the Mohawk Lease, Goldfield, Nev., and A. N. Goddard presented a crystallized specimen of gold from California and one opal in the matrix from the Carbanera mine, Guerrero, Mexico. The Foreign Economic Administration, through James S. Baker, transferred five specimens of cassiterite, tantalite, and muscovite, from Madagascar and Brazil. Another transfer came from the Metals Reserve Co., through Charles B. Henderson, consisting of a quartz crystal weighing 5.7 pounds, from Ashe County, N. C. This is said to be the finest quality quartz found in the United States.

While temporarily stationed at the School of Tropical Medicine, Walter Reed Hospital, Maj. W. B. S. Thomas presented a twinned diamond crystal from near Accra, Gold Coast, Africa. An unusually fine crystal of ruby muscovite from Urubu mica mine, Espera Feliz, Minas Gerais, Brazil, was acquired from A. Renato Semola and Elipidio Pitta, through the efforts of D. M. Larrabee.

Prof. Paul F. Kerr donated a specimen of tungstite and hydrotungstite, a new mineral from near Oruro, Bolivia, and Prof. John W. Gruner presented a specimen of groutite, a new hydrous manganese oxide from Cuyuna Range, Minn. An unusually elongated concretionary form of marcasite from Delaware County, Ohio, was a gift of R. F. McAlester. The Geological Survey transferred an analyzed sample of siderophyllite (an iron-rich biotite mica) from Alaska.

A sample of uraninite, 1,002 grams in weight, from Cornwall, England, and a crystallized andradite garnet from Graham County, Ariz., were obtained by exchange with Ward's Natural Science Establishment. Various muscovite mica specimens were collected for the Museum from many different producing areas in New Hampshire, and presented by Philip W. Gates. A series of cross sections of twinned crystals of Brazilian quartz formed a gift by Paul B. Bunton. From the Eureka Mica Mining Co., through N. W. Sides, several specimens of muscovite from Rio Arriba County, N. Mex., were received, and five natrolite specimens from San Benito, Calif., came from W. W. Bradley. Other gifts were one thulite (pink variety of clinozoisite) from Singatse Range, Lyon County, Nev., from Hatfield Goudey, and a fluorite from San Juan, Ouray County, Colo., from Mrs. Mary E. McClellan, through the Geological Survey.

The Drum Mountain, Millard County, Utah, meteorite was added to the collections through the Roebling income. This 1,164-pound example was discovered last year by Y. Nishimoto and A. Ujihara, two Japanese who were temporarily located at the camp near Topaz, Utah. Dr. Stuart H. Perry, associate in mineralogy, presented an 81-pound mass of the Odessa meteorite, while Ensign Floyd A. Rapp, of the Merchant Marines, acquired a good specimen of australite while he was in Perth, Southwest Australia, which he donated to the collections.

A suite of 22 nickel ores from New Caledonia was an important addition to the ore collections during the past year, received by gift from C. H. Schneider. Frank L. Hess presented two specimens of uranium minerals from the Ruggles mine, Grafton Center, N. H., and one of granite from the dike at Hodgeon Hill, Buckfield, Maine. Chauncey L. Butts presented a gold ore sample from the Independence mine, Alaska, and 3 specimens of obsidian from Amchitka Island, Aleutians. The Geological Survey transferred 6 specimens of high-iron and high-alumina clays from Clinton County, Pa., a specimen of lead-zinc ore from the Kimberly mine, Kokomo district, Summit County, Colo., collected by A. H. Koschmann, and a specimen of calomel (mercury ore) from the Mariposa mine, Brewster County, Tex., collected by R. G. Yates and G. A. Thompson. While on field work for strategic minerals in Mexico under the direction of Dr. W. F. Foshag, Ivan F. Wilson visited the Compagnie du Boleo, Santa Rosalia, Baja California,

where he collected eight specimens of copper ores and shipped them to the Museum as a gift from Pierre Mahieux of that company.

The rock series and objects illustrating physical geology received the following additions: The Geological Survey transferred a collection of 34 samples of manganiferous and ferruginous cherts from Perry and Lewis Counties, Tenn. Through Maj. Thomas C. Holland, Chaplain, U. S. Army, Mrs. Clarissa Humphreys presented the silicified interior of a septarium nodule from Montague County, Tex. Kaolin from Ringgold, Tenn., and a bauxite from McIntyre, Ga., were gifts of P. S. Roller. Further interesting additions to the geological collections were 28 marcasite septaria from the Devonian of Ohio, from C. C. Hamel, and 13 iron concretions from the northern area of the Black Hills, S. Dak., from L. Allen Higley.

Invertebrate paleontology and paleobotany.—The total of 22,542 specimens for the year in this division is more than 7 times the number accessioned in 1944 and is reminiscent of the good years before the war.

One of the most noteworthy transfers from the Geological Survey for some years was recorded this year. This was the extensive Paleozoic collection made in the southern Appalachians by Dr. Charles Butts, geologist in that organization now retired, but still engaged in research in this division. This collection, numbering more than 10,000 specimens and representing the accumulation of many years of field work in Alabama, Georgia, Kentucky, Pennsylvania, and Virginia, is highly important for the information it contains bearing on the stratigraphy of the Appalachians.

Another worthy transfer from the United States Geological Survey was that received through the Chief of Engineers, U. S. Army, from the Canol Project, Canada. The 3,500 specimens of Silurian, Devonian, and Cretaceous fossils comprising this transfer, mostly of fair quality, are of particular interest in their source, the remote regions of the Canadian Northwest.

An outstanding addition of the year, the Bruno Louis Zimm collection of about 3,000 Devonian (Oriskany) fossils from the famous locality at Glenerie, N. Y., came to the Museum as a purchase through the Walcott fund. This collection includes many rare and unusual types, mostly of silicified specimens of brachiopods weathered from a siliceous limestone. Mr. Zimm, noted sculptor and amateur geologist, painstakingly gathered these delicate, beautifully preserved shells from solution cavities in the rock where they had accumulated.

Eight lots received by transfer from the Geological Survey contained mostly specimens sent in by geologists for identification.

Important type specimens were received as follows: E. R. Applin, University of Texas, presented 55 slides of Cretaceous and Tertiary Foraminifera from subsurface formations in Florida, including many primary types; Dr. Rousseau Flower deposited half of the type

specimen of the interesting cephalopod *Endoceras faberi* Foerste; Dr. J. Brookes Knight presented five specimens of a Pennsylvanian gastropod soon to be described as a new genus; Dr. S. A. Northrop gave four type specimens of nautiloid cephalopods from Permian rocks of New Mexico; Dr. Bradford Willard presented the type specimen of the Ordovician starfish *Taeniaster maximus* Willard; Dr. J. Stuart Williams gave the types of the peculiar Mississippian blastoid genus *Ambolostoma;* and Dr. G. A. Cooper, curator, turned over a unique color-marked Devonian brachiopod received as a personal gift to him from Dr. Darling K. Greger.

In the section of Cenozoic invertebrates, Benton Stone donated the types of a Peruvian Upper Eocene foraminifer. Tertiary larger Foraminifera from Panama and countries to the south formed a gift of Dr. A. A. Olsson, and similar larger Foraminifera from the Tertiary deposits of Morocco were received from Dr. Alfred Senn. Fifteen lots of the larger Tertiary Foraminifera of Panama were presented by Robert A. Terry.

Other interesting gifts included a collection of Devonian invertebrates from Rockford, Iowa, received from A. L. Haines; over 800 specimens of Upper Ordovician Ostracoda from Missouri, received from James E. Keenan; 19 Permian brachiopods from New Mexico, from Dr. R. E. King; 250 specimens of Silurian and Devonian corals from western New York for the biologic series, gift of Irving G. Reimann; and 500 specimens of Middle Devonian brachiopods received from Charles Southworth.

Three accessions were made up of material collected by the curator in the Appalachians and Mexico. The two accessions of Appalachian material brought mostly stratigraphic lots, including 1,350 specimens of invertebrate fossils and some silicified material to be etched. The Mexican collections consisted of Cambrian, Devonian, Mississippian, and Permian fossils from northwestern Sonora and will add a fair number of types to the collection. No count of the specimens can be given until all the material is prepared and then divided with the Geological Institute of Mexico according to prior agreement.

Through the special fund left for the purpose, the Springer collection of fossil echinoderms was enriched by purchases of Devonian crinoids from Ontario, from Charles Southworth, and of unusual Mississippian crinoids from the vicinity of St. Louis, Mo., collected by William Saalfrank. Additional specimens from the same St. Louis area were received in exchange with Charles E. Rhodes.

Ordovician fossils numbering over 350 from the St. George and Table Head formations of Newfoundland, an exchange from Dr. Helgi Johnson, were valuable additions to the stratigraphic series.

In paleobotany, a fossil hazelnut and 58 specimens of fossil woods from the Virgin Basin of Nevada, gift of Mark M. Foster, formed a worthy addition to the fossil-plant study series.

Vertebrate paleontology.—In spite of the necessary cessation of field work, an annual source of valuable material in this division, the 10 accessions received included some unique specimens desirable for both the exhibition and study series.

The outstanding exhibition specimen received was a composite skeleton of the large flightless pigeon *Dodo ineptus*, from Mauritius, which came by transfer from the division of birds. Although this unique bird continued to exist into historic time, its skeletal remains are exceedingly rare.

A collection of 350 sharks' teeth presented by the Misses Eleanor R. Binger and Anita James; a nearly complete dental plate of the extinct ray *Myliobatis*, presented by James B. Schultz, both from the Miocene of the Chesapeake Bay region; a molar tooth of the northern elephant *Mammonteus primigenius*, donated by Orville R. Edner through Robert Teeters; and a bird egg found 7½ feet below the surface of Tinian Island in the Marianas Islands, the gift of Villion E. Riker, are accessions to the study series deserving special mention.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Three years ago the evacuation of the fossil, mineral, and rock type specimens to a place of safety was the major object of our activities. Now, happily, the time has arrived to announce the safe return of these specimens and their replacement in the study collections of each division.

The head curator unpacked and replaced the type specimens of fossil echinoderms, corals, Bryozoa, Ostracoda, and insects, segregating them, in the case of the small and delicate organisms, from the general biological series. He was assisted materially by Miss Helena M. Weiss in checking and arranging the several thousand type specimens of microscopic fossils and thin sections. Similarly, Curator G. A. Cooper cared for the brachiopods, trilobites, and mollusks. In some instances he assembled the types in a body at the end of their particular groups, but with the brachiopods and gastropods it was necessary for the present to restore them to their original places in the biological collections. The Mesozoic invertebrate types, all restored through the help of Dr. J. B. Reeside, Jr., and several members of the Geological Survey staff, will henceforth be maintained as a separate type collection. Dr. R. W. Brown, of the same staff, undertook the care of the large collections of Mesozoic and Cenozoic plant types. Dr. Brown has done invaluable work in preparing, identifying, and generally improving the plant collections of these two eras. The Paleozoic plant types, which were packed by Dr. C. W. Read, also of the Geological Survey, await his return from field work before their return to the collection. Dr. Bartsch reports the safe return of the Cenozoic invertebrate types under his care.

Curtailment of staff and preoccupation with war activities, as well as an unusually large amount of examination and report work, have slowed progress in caring for the general collections of the division of invertebrate paleontology and paleobotany. The curator was able to do but little on the exhibition collections, but some work was carried on in that field by the head curator with the assistance of Miss Jessie Beach and James Benn. This consisted mainly in cleaning and rearranging the exhibits and replacing or adding lettered labels of explanation or orientation to the exhibition cases.

The paleobotany hall in the east wing, first floor, was reorganized during the year to permit an expansion of the vertebrate fossil exhibits through its center. Both the taxonomic and stratigraphic displays of fossil plants were restricted to a single series occupying the long continuous south wall case, with one exception. The fossil tree trunks and other large striking displays were retained on the floor at the west end not only because of their size but as an introduction to the hall. This streamlining of the plant exhibition series permits better lighting and in other ways makes it more easily comprehended by the visitor.

The small steady increments that are usually added to the study collections continued. Each year sees these collections enriched by choice specimens acquired by exchange or purchase, through endowment funds, or through field work of the staff members. The best specimens are transferred from the stratigraphic collection as they are studied, and a cross reference of such specimens is maintained so that the stratigraphic value of the original collection is not destroyed.

The head curator continued the work of identifying and modernizing the Paleozoic coral collection This work, requiring thin sections, necessarily goes slowly, but the slide collection is constantly being enlarged. Curator Cooper assembled all the Crustacea into one continuous series and completed the arrangement of the trilobites and brachiopod portions in rooms adjacent to his office. Dr. J. Brookes Knight, associate curator, likewise assembled the Paleozoic gastropod collection and made progress in its revision and relabeling.

A good part of the curator's time during the year was devoted to the preparation of the fossils resulting from his 1944 expedition to Sonora. All this material has been prepared except the Mississippian, which consists of numerous blocks of fossiliferous limestone now being dissolved in acid in order to free the fossils, an operation that has been going on for many months. The large vat for etching by acid was also in constant use during the year, yielding many fine specimens from the silicified blocks collected in Texas in 1941. The curator prepared and photographed all the Cambrian trilobites and Permian fossils from Mexico, including the specimens that will become types. In addition, he prepared for photography about 150 specimens from

the southern Appalachians to be added to the brachiopods that are to be illustrated in a monograph on the Chazyan and related brachiopods.

Special mention should also be made of the work of L. G. Henbest on the collection of Foraminifera. Mr. Henbest, the Geological Survey specialist on this subject, reports that all foraminiferal types, preserved mainly mounted on standard slides, have been segregated and stored in a steel cabinet. He also brought together into one room all the Museum collections of this group except those now under study by Dr. T. Wayland Vaughan. This organization of the collection has greatly enhanced its usefulness as well as its safekeeping.

Little work could be done on the stratigraphic series during the year because of lack of preparatory help. Some collections were added through Dr. Cooper's field work in the Appalachians and by transfer from the Geological Survey. Much work is needed here in the way of weeding out poor material, concentrating the collections, and rearranging them to make better use of the space they occupy. These moves, however, will have to await additions to the staff.

The division's lack of staff, especially preparatory help, is piling up a backlog of work on the collections that will become staggering if it cannot soon be arrested. The war has diverted the Geological Survey paleontologists from whom we normally receive a great deal of aid so that our progress since the coming of war has been exceedingly slow and sporadic. The collections are in reasonably good arrangement and fairly clean, but they are naturally getting out of date.

The assignment to the division of vertebrate paleontology of additional exhibition space in the north range of the east hall, formerly occupied by paleobotany, has permitted a rearrangement that has not only greatly improved the appearance of the exhibits as a whole but also has brought about a more natural grouping. For the first time in the division's history the extinct birds are brought together as a unit, filling one alcove. The specimens have been newly renovated, and, with the added attraction of a dodo skeleton transferred from the division of birds, they present an assemblage that should prove interesting to our visitors.

Besides supervising the preparatory work in the laboratory, Chief Preparator Norman H. Boss finished the mount of the *Hypertragulus* skeleton mentioned in a previous report. He also mounted and installed a skeleton of the primitive titanothere *Paleosyops paludosus*, which is a beautifully executed piece of preparatory work. He is well advanced at the present time in mounting a skeleton of *Merycoidodon culbertsoni*, a mammal from the Oligocene rocks of Wyoming. All three of these animals are new to the exhibition series.

After spending the early part of the year in the preparation of miscellaneous specimens for the study collection, Thomas J. Horne has since been continuously employed in restoring the missing parts and mounting a skeleton of *Scelidodon,* a large sloth from Bolivia. This specimen, acquired through an exchange with the Chicago Natural History Museum, will form a unique as well as an attractive addition to the exhibition hall.

Arlton C. Murray, in addition to assisting the two preparators, has been engaged in the preparation of various specimens for the study collections. He also made a considerable number of plaster bases for delicate specimens, thus insuring them against breakage through the opening and closing of the drawers in which they are kept.

Mrs. Vera M. Gabbert, outside of her regular stenographic duties and keeping up the records of the office, rendered efficient service in checking and revising the card catalogs. She finished the fish, amphibian, reptilian, and avian files and made a good beginning on the mammalian cards. Now it can be reported that, for the first time in the history of the division, the catalogs are in splendid condition.

In order to determine the status of outstanding loans to various individuals and institutions, a circular letter was sent to all these correspondents, with the result that a majority of the specimens were promptly returned. In a few instances where research problems were still in progress requests for extension of the loans were granted.

At the time the choice minerals were removed from the exhibition cases for evacuation in the division of mineralogy and petrology, they were replaced by other samples from the study series. Therefore, with the return of the evacuated material, the first task was to remove the temporarily installed specimens and incorporate them again into the study collection. These, with the crystal ball, valuable gems and precious stones of exceptional worth, and the many type and analyzed rocks and minerals, were returned to the exhibition or study series without loss or damage.

In the mineral exhibition hall two new cases were constructed for the installation of some exceptionally fine gem stones. These cases introduced special lighting problems, making it necessary to build a preliminary model for experimental work in the display of the material. One case exhibits only gems with chatoyant properties, such as star sapphires, rubies, and the mineral cat's-eye, while the other one is devoted entirely to fire opals of exceptional color display. All the regular gem and mineral displays were improved with a number of additions during the past year, and new labels replaced the older ones whenever it was deemed necessary.

In January Mr. Benn inaugurated a new mineral exhibit, namely, a case devoted to the current birthstone of the month. Located at the entrance to the mineral hall, this display has attracted considerable

attention. Mr. Benn continued the locality index of all minerals now in our collections, which is particularly useful at present with the many calls for locality information. The type collection of minerals was rearranged and carded by a new system permitting additions without the many shifts necessary in the former method. The lantern slides of meteorites were indexed and cataloged up to date.

B. O. Reberholt reports that during the year the grinding and polishing laboratory completed 80 thin sections of rocks and fossils; cut, polished, and etched 39 meteorites; and cut and polished 136 ores, rocks, and minerals, in addition to performing the other usual tasks of his laboratory.

INVESTIGATION AND RESEARCH

In the identification work on the collections of corals, bryozoans, and echinoderms under his special care the head curator made fair progress and completed a manuscript entitled "New Species and Faunal Lists of Paleozoic Corals." Less advance was made on several previously reported research works because of the time required to unpack and restore the evacuated type specimens. One paper, "Memorial to Edward Oscar Ulrich," former honorary associate in paleontology, was prepared and published by the Geological Society of America.

Dr. G. A. Cooper spent most of his research time on fossils from Sonora, Mexico, with the result that all the Permian fossils have been studied and manuscript prepared on them. In addition to this, some time was found for the Appalachian studies, which led to a discussion of the Appalachian Middle Ordovician stratigraphy for the National Research Council chart. A joint paper with Dr. Byron N. Cooper, of the Virginia Geological Survey, largely written by B. N. Cooper, was also finished for publication.

Dr. Cooper prepared about 3,000 photographs of fossils during the winter for use in the reports on Sonora, the Appalachians, brachiopod studies, and the Permian brachiopod studies. No continuous work has yet been done on the Permian brachiopods of the Glass Mountains, Tex., but over a hundred specimens were photographed during the winter when conditions were good for photography. He planned to take up this study of Permian brachiopods in earnest as a postwar project. Early in the fiscal year the paper on the stratigraphy of the Devonian of Illinois was delayed by new developments in connection with the subsurface discussion. In order to correct the difficulties Dr. A. S. Warthin, of Vassar College, coauthor of the paper, spent several days in Washington in further study and is now rewriting the subsurface portion. As soon as this part is completed the paper can be submitted for publication.

Dr. J. Brookes Knight, temporary associate curator, during the three months spent at the Museum, prepared two papers describing new genera of Paleozoic gastropods of the superfamilies Bellerophontacea and Pleurotomariiacea.

Dr. T. Wayland Vaughan, associate in paleontology, was busy during the year with his studies on the larger fossil Foraminifera and with his care of the collections of this group and also of the Cenozoic corals.

The members of the Geological Survey staff with offices in the National Museum have, as in past years, continued their investigations of the geological collections. Dr. J. B. Reeside, Jr., chief of the section of paleontology, when not occupied in administrative matters, forwarded his researches on Mesozoic fossils. He also reports progress on the National Research Council correlation chart of the Jurassic and Cretaceous of the western interior of the United States. Dr. Ralph Imlay is studying the Jurassic fossils of the western interior of the United States and Alaska. Dr. H. E. Vokes is occupied with Tertiary fossils from Oregon and Washington, as well as his studies of Mesozoic Pelecypoda. Dr. L. W. Stephenson is engaged on the description of the Cretaceous (Louisville formation) of Texas; Dr. Edwin Kirk is proceeding with his studies of Paleozoic crinoids; Dr. R. W. Brown, paleobotanist, has a revision of the Eocene (Wilcox) flora of southern United States well under way. Dr. Wilbert Haas, assisted by Miss Patricia Proctor, is restudying and redescribing the type specimens of conodont fossils belonging to the National Museum and conducting research on these fossils occurring in late Devonian and early Mississippian rocks. L. G. Henbest is continuing work on fossil Foraminifera. Dr. Charles Butts, retired member of the Geological Survey, is continuing his researches on the fossils and stratigraphy of the Paleozoic rocks of Georgia and parts of southern Virginia. Dr. C. Wythe Cooke is preparing a monograph on the Upper Cretaceous echinoids of the United States.

Curator C. W. Gilmore, of the division of vertebrate paloentology, completed a manuscript entitled "A New Carnivorous Dinosaur from the Lance Formation of Montana." This was based on a specimen belonging to the Cleveland Museum of Natural History. A second manuscript, "A New Crocodilian from the Eocene of Utah," was finished and transmitted for publication. Mr. Gilmore also devoted some time to assembling information for a revision of the type catalog.

Associate Curator E. P. Henderson reports that because of numerous interruptions many of the research investigations in mineralogy and petrology that were started could not be completed and that the pressure of identification work made it necessary to interrupt some of the work in progress and start new investigations. At present there is a rather large backlog of partly completed research. During the

year a chemical analysis and mineralogical identification were made of brazilianite (hydrous sodium aluminum phosphate), the new mineral from Brazil.

Several new meteorites were analyzed: New Westville, Edmonton, Linwood, Drum Mountains, and Pine River. A specimen of taenite, the nickel-rich alloy, was laboriously selected from the New Westville meteorite, and the nickel and cobalt and phosphorous contents determined. Dr. Stuart H. Perry partly completed the metallographic study of the above-mentioned meteorites, and within a short time their descriptions should appear.

Many of the minerals in the collection were X-rayed and spectrographed by members of the Geological Survey. Some of this work was necessary to assist the Survey members to identify minerals under investigation. These X-ray studies in part represent an effort for the division to have a more authoritative classification of many of our minerals. Dr. M. A. Peacock, of the University of Toronto, also studied in detail some of our minerals.

Curator W. F. Foshag continued on detail throughout the year in his investigations of the economic resources of Mexico. Much of his time was spent in the field as director of the Geological Survey projects for the discovery of strategic mineral bodies.

There were 207 lots of geological material referred officially to the department for examination and report, many of these involving large numbers of specimens requiring special attention. For instance, the 38 lots of fossils referred to invertebrate paleontology and paleobotany consisted of over 1,000 specimens. The division of mineralogy and petrology was charged with 104 lots of rocks and minerals; vertebrate paleontology with 20 lots; and general geology cared for by the head curator, 45 lots. In addition to the material received officially, each division reported on specimens mailed directly to the curators or brought in person, as noted in the reports given below. Official correspondence requiring replies on problems of geological nature numbered 347 letters.

Sixteen loans were made to outside investigators totaling 464 specimens of invertebrate fossils, and in addition 93 photographs of Ordovician brachiopods were prepared for Rutgers University in exchange for a collection of Newfoundland Ordovician fossils. Several other institutions throughout the country were aided in various ways. As in the past, the invertebrate paleontology and paleobotany staff and the members of the Geological Survey worked together in exchanging identifications of materials sent in to each organization.

Loans of mineralogical and petrological materials were made to 15 institutions for research. In addition much professional service was given to the public—this year 467 individuals called in person for assistance pertaining to gems, minerals, and meteorites.

Curator Cooper, in connection with his two field trips in the Appalachians, visited the Geological Survey of Virginia in the summer and fall of this fiscal year. He also made a trip to New York State to pack the large collection of Devonian fossils purchased from Mrs. Louise Zimm. Associate Curator Henderson visited the Carnegie Institute of Technology in Pittsburgh and discussed work in the metallography of meteorites. Early in the year he spent several days in New York City packing and shipping the fine mineral collection obtained from the estate of the late Dr. James Douglas.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Geological materials distributed during the year totaled 876 specimens. Thirteen gifts, containing 180 specimens, were sent out including principally rock and mineral sets to schools and universities, and paleontological specimens to research organizations. Exchanges of 88 specimens were completed with 16 institutions and individuals engaged upon research. Eighteen specimens, comprising three transactions, were transferred to other governmental agencies. Universities, research students, Government war agencies, the Red Cross, and similar organizations arranged for 44 loan transactions during the year, aggregating 590 mineralogical and paleontological specimens.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The total number of specimens indicated below for the three divisions of the department is computed by adding to the estimated figures of last year the number representing the difference between the number of specimens received and those sent out this year. Inasmuch as the early estimates were approximate, the present sums must continue to be so.

Mineralogy and petrology	257,085
Invertebrate paleontology and paleobotany	2,423,720
Vertebrate paleontology	29,808
Total	2,710,613

DEPARTMENT OF ENGINEERING AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

IN this war year with its continuing emergency measures and manpower shortages, the activities of the department of engineering and industries were confined almost entirely to the processing of new accessions and to the unpacking and redistribution of its large tonnage of specimens returned from air-raid protection storage. New accessions were greatly in excess of the expected volume, being comparable in number to the average annual increment of 10 years ago. Fortunately, the demands on the department staff for assistance to war agencies and for information from private investigators and students were considerably less than in previous war years, so that by the end of the year all current work was well in hand.

During the first four months of the year, Carl W. Mitman, head curator, continued with his special assignment of the maintenance of the Museum's collections in protective storage outside of Washington. This undertaking was terminated, however, in November 1944, and under Mr. Mitman's direction the entire collection of more than 60 tons of valuable specimens was safely returned to the Museum.

With great sorrow the death on March 21, 1945, of Lt. Stephen C. Stuntz, Jr., former scientific aide in the division of graphic arts, is here reported. Lt. Stuntz was on military furlough from his position in the Museum and in the course of his brief military life advanced from inductee to liaison officer between ground and air forces. He was killed in a plane crash over Cebu City, Philippine Islands. Stephen Stuntz was one of the best known and best liked of Smithsonian employees, and his loss is deeply felt by the entire Institution. Of all the 43 Smithsonian men in the service in this war, this was the only fatality.

ACCESSIONS

Accessions for the year totaled 178, comprising 3,199 specimens. This is an increase of 14 accessions and 1,811 specimens over the previous year. The accessions were distributed as follows: Engineering 39 (77 specimens); crafts and industries, 57 (2,681 specimens); graphic arts, including photography, 82 (441 specimens). Of this large group, the following are deserving of special mention:

Engineering.—The outstanding accession in this division is the first experimental jet-propelled pursuit airplane built and successfully flown in the United States. Known as the Bell Airacomet XP 59A, it was designed and constructed by the Bell Aircraft Corporation at the

request of the U. S. Army Air Forces in 1941–42 and was first flown by Robert M. Stanley, former chief test pilot of that corporation, on October 1, 1942. Following over 2 years of "guinea-pig" service in the Air Forces involving several hundred flights, the airplane was transferred by the War Department to the National Museum. Here it holds the unique position of being the first propellerless airplane in the collection, and it represents as well, perhaps, the greatest new development in aeronautical engineering of the past decade. The Airacomet may be technically described as a twin-engine, single-seater fighter plane with retractable tricycle landing gear. The engines, located beneath the wing, one on each side of the fuselage, were produced by the General Electric Co. on modifications of a British design developed by Group Captain Frank Whittle, RAF.

The automotive collections were enhanced by two unique gifts—a radial 9-cylinder Diesel engine and an original 1902 Oldsmobile. The Diesel engine is one of the type designed for and used in the U. S. Army M3 light tank. It was made especially for the Museum, with the Army's permission, by the Guiberson Diesel Engine Co., and is sectionalized and operating. It serves well to demonstrate to the layman the modus operandi of a modern Diesel, and at the same time reveals a type of power plant used by the United States armored forces in World War II. The 1902 Oldsmobile came to the Museum as a bequest of the late Thomas A. Peabody. It is a beautifully preserved, complete, unaltered, original specimen of the famous curved-dash tiller-steered, 2-passenger runabout, produced by the pioneer automobile manufacturer R. E. Olds. The Museum's model is one of 2,500 produced in 1902, a quantity far above that of any other contemporary automobile manufacturer, and sold at the then unheard of price of $650. This low cost in combination with the proven sturdiness and dependability of the "Merrie Oldsmobile" of the early 1900's contributed much to making America automobile-minded.

Two accessions of note added to the department's communications collections, radio section, were a Marconi coherer and a spark transmitter presented by Oscar C. Roesen. The Marconi coherer was the "heart" of wireless telegraphy before the invention of the electron tube and is, therefore, a required object in any visual record of wireless communication. Heretofore an original coherer was not included in the Museum's collection, and so Mr. Roesen's gift was especially appreciated. The wireless transmitter is of the year 1911 and is one of the earliest experimental sets designed by Mr. Roesen for wireless communication between an airplane and the ground. With this set installed in a Curtiss airplane, the pilot while in flight transmitted intelligible Morse-code messages to a receiver on the ground. Another interesting communications object added to the collections was an original electric telegraph fire-alarm and street box

such as was installed on the streets of Boston in 1851. One of the earliest practical systems of fire alarm signaling by electric telegraph was invented by Moses G. Farmer and Dr. William F. Channing, of Boston, and it is believed that the street box outfit, described here, is a relic of one of the first commercial installations made by the inventors. The street box and contents were presented to the Museum by the Gamewell Co., well-known manufacturers of fire-alarm equipment.

Crafts and industries.—The 2,681 specimens covered by the new accessions of this division were distributed as follows: Textiles, 1,083; woods, 118; chemical industries, 91; agricultural industries, 24; and medicine, 1,365. In textiles, an outstanding accession of the year is a historic document deposited by Mrs. Georgia Slater Bartlett and her sister, Miss Lydia R. Slater. This is the original indenture of their great-grandfather, Samuel Slater, to Jedediah Strutt and was signed by both of the contracting parties in Derbyshire, England, on January 8, 1783. After completing his apprenticeship of 6½ years in the art of cotton spinning, Samuel Slater, a youth of 20, decided to try his fortune in America. The English, or Arkwright system, of continuous spinning was unknown here, and a strict embargo was enforced in England to prevent workers, models, or drawings of any sort from leaving the country. Consequently, young Slater brought with him only the indenture. Owing to his remarkable photographic memory he was able to build in Pawtucket, R. I., the machinery for the first mill in this country for spinning cotton by the Arkwright system. The National Museum, as custodian of Samuel Slater's original cotton-spinning frame and of one of his cotton-carding machines, is indeed fortunate in being able to include the indenture with the original machinery. Another historically important gift, presented by Mrs. Mary Stafford Reed, consists of a collection of books containing samples of printed cotton and wool fabrics, with recipes for dyeing and printing. These were used during the 1870's and 1880's in England, and in Dover and Manchester, N. H., by an English dyer, Thomas Stafford.

Wartime textiles and those inspired by the war are represented in the following gifts: A machine-gun turret-slot installation using "Tackle Twill" for extending the tape of a slide fastener, from the Spool Cotton Co. and Crown Fastener Corporation, through William Skinner & Sons; types of fireproof cloths of fiberglas and asbestos yarns, and the application of these in a side section of the tail-wheel boot for a P–47 Thunderbolt plane, from Campbell Products; acetate rayon fluorescent satin, used for signal panels by the U. S. Army Signal Corps, from J. P. Stevens & Co.; and a series showing the screen-printing process of ornamenting a jacquard-figured rayon crepe with a 3-color, army automobile motif, together with the actual

screens used for the application of each successive color, from William Skinner & Sons. A particularly interesting item with this group is a printed nylon camouflage cloth with irregular-shaped blotch patterns simulating foliage, and designed as protective coloring for army parachutes. The textile study series were enhanced through the generous gifts of Miss Ruth M. Brenner and Mrs. Blanche C. Lewton. Miss Brenner gave 984 pictorial prints on cotton, rayon, and silk cloths classified by inspirational sources, while Mrs. Lewton presented representative rayon fabrics identified by name, weave, material, use, and source.

To the collections of early homecraft textiles a number of noteworthy specimens of weaving, needlework, and supplementary items were added by gifts and loans. Included were a pictorial linen tablecloth from Everett Mellen Stevens and his children and household homespuns from the Rev. Walker Mayfield; coverlets in overshot and single and double jacquard weaves from Miss Lou Babb Rusk, Mrs. Gertrude O. S. Cleveland, and Mrs. Ethel V. Noel; pieced and appliqued quilts from Mrs. Helen R. Payne and Norman L. Kilpatrick; and examples of hand-embroidered cotton, linen, and silk, and pen-and-ink work, from Mrs. Clarence J. Robinson and Miss Maude M. Fierce.

A gift of historical importance to the section of chemical industries was a series of specimens of lewisite, American mustard gas, or "blister gas," and derivatives therefrom, prepared by Maj. H. W. Stiegler for use by Col. W. Lee Lewis, in his many lectures on chemical warfare. The specimens are in sealed glass tubes arranged in an ingenious mahogany case, designed and made by Major Stiegler in such a way that they can be easily removed for classroom demonstration. The case of specimens was presented by Mrs. W. Lee Lewis, the widow of the man who first isolated and developed this deadliest of World War I gases. An umbrella frame constructed with ribs of whalebone and used by G. Hobbs between 1835 and 1865 at Barre, Mass., was presented by his grandson, A. M. Harrington. This was added to the extensive series of articles made from whalebone already in the Museum. Two pneumatic life rafts, a U. S. Army A–3–4 type and a U. S. Navy Mark IV type D, made of synthetic rubber, with full sets of the contractor's emergency equipment were loaned by the Goodyear Tire & Rubber Co., for exhibition with other materials showing important uses of rubber in World War II.

Accessions of scientific value in woods and wood technology were 20 woods collected with herbarium material by Lt. C. H. Stoddard, U. S. Naval Reserve, in the Russell Islands group of the Solomon Islands; 12 woods, collected mostly in the State of Amazonas, Brazil, also with herbarium material, by Dr. J. T. Baldwin, Jr., and transferred by the Office of Rubber Investigations of the Department of

Agriculture; 63 specimens, mostly trade samples of the woods of the Philippine Islands, a gift from Maj. Alfred H. Thiessen, U. S. Army (retired); and 2 very interesting specimens collected by J. L. Stearns. One is a piece of the wood of a chinaberry tree, *Melia azedarach*, grown near Memphis, Tenn., which shows unusually wide annual growth. The other is stemwood of the common poison ivy, *Toxicodendron radicans*, cut on the bank of the Patuxent River near Laurel, Md., from a vine over 3 inches in diameter.

The outstanding accession in the division of medicine was the entire equipment and furnishings of an Old World apothecary shop of the period of 1750. This large collection, consisting of nearly 1,200 specimens, was gathered in Europe over a period of 40 years. It is unique in completeness of original materials and in its variety. It was acquired by E. R. Squibb & Sons and brought to the United States in 1932, when part of it was exhibited at the Century of Progress Exposition at Chicago. Subsequently it was assembled in New York City as a private museum. The fixtures of the old shop were part of the Cathedral Pharmacy, Freiburg, Germany. The mortars, bottles, drug jars, and other objects of the original shop are supplemented by like specimens from shops of the same vicinity and period. Wooden drawers, which were once filled with drugs, still retain their original labels. Books, many handwritten and some incunabula, from which pharmacists of the eighteenth century obtained their knowledge, are part of the collection, as are the instruments, appliances, and tools, with which they worked. Of unusual interest are the franchises, issued and signed in 1728, 1791, and 1824, by Emperor Carl VI, Emperor Leopold II, and Pope Leo XII, respectively. The seals of the first two are enclosed in walnut boxes, and the seal of the last in a silver-plated brass case. These franchises gave the pharmacists to whom they were issued the right to prepare and sell "life pills," to produce and sell a healing plaster, and to establish a new pharmacy in Rome, respectively. Stuffed animals, which were prominent adornments of early apothecary shops, are also included. In the eighteenth century, parts of crocodiles, lizards, tortoises, sharks, and similar animals were medicinal agents, and people were convinced that the store that exhibited the animals dispensed the real medicines and not substitutes. Today, as in the days of old, drug stores consist of two rooms, one in which the pharmacist makes contact with customers, and the other a combination of laboratory, workshop, and study. The collection when exhibited in New York City followed this pattern, and a similar installation is now under way in the Museum. This valuable collection was donated by E. R. Squibb & Sons to the American Pharmaceutical Association, and the association in turn has made it available to the Museum as a deposit.

Graphic arts.—The accessions received by this division surpassed those of the previous year both in quantity and in general importance. Chief among the accessions was the unique gift of Charles W. Dahlgreen, who presented the Smithsonian Institution with 76 copper plates of his work in etching, aquatint, and drypoint. These plates, many of which are in almost unused condition, were deposited with the division of graphic arts with the understanding that they are to be used to make prints, to be sold as a Smithsonian Edition. The proceeds from the sales will compose the Charles W. Dahlgreen fund, which will be used to enlarge and improve the collections of graphic arts. In addition, Mr. Dahlgreen presented a series of 76 etchings and drypoints printed from these plates. This handsome collection of prints makes one of the largest representations of fine prints by a single artist in the Museum's collections.

Another accession of importance was a miniature working replica of the Stephen Daye press, the first printing press to be used in the American colonies, 1639. The model is the work and gift of Alfred T. Breitengross. It is made in brass and executed with such accuracy and precision that, although the model press is but 7 inches high, it is possible to do actual printing with it.

Dr. Edwin Kirk presented 12 etchings, a number of them of outstanding quality. "La Pompe Notre Dame" and "Ministère de la Marine," by Charles Meryon, the great nineteenth-century French etcher, are works of considerable value and are the only examples by this artist in the collection. "La Place Pigalle," by Felix Buhot, another famous French etcher, is a highly desirable print. Dr. Kirk also contributed excellent prints by Lalanne, Pennell, Ribot, Flameng, Moran, Chauvel, Taylor, and Rajon. Another accession worthy of mention was the gift made by Joseph P. diGemma of three fine prints made from plaster relief blocks and one print from a rubber relief block. The prints from plaster constitute a new use of this material and form a contribution to graphic-arts printing processes. The work is executed in the same manner as that of the linoleum cut or wood cut, but, since the plaster would absorb the printer's ink and crumble under pressure, the surface is treated with a coat of linseed oil, which has the property of preventing absorption as well as making the edges of the plaster firm. No press is used in the printing, which is done by rubbing the back of the paper with a smooth, hard object.

Little has remained of the technical equipment of American painters of a hundred years ago, a circumstance that makes particularly desirable a gift from Mrs. Olive Cole Smith of a paint box, bladders, tins, and packets of pigment used by Deborah Goldsmith Throop in 1830. The bladders are especially to be noted since they were in general use as pigment-containers before the invention in 1841 of the collapsible metal tube. Mortimer Borne contributed to the

collections a color print of a unique type, a drypoint printed in color from three plates in red, yellow, and blue inks. Mr. Borne states that this process has never been used before, although other artists have used drypoint in combination for color work. His gift of "The Road" is therefore of unusual interest. Artists whose work was shown during the year in the division's special monthly exhibitions were the source of interesting additions to the permanent print collection. Thus two color aquatints, a lift-ground etching and a soft-ground etching, were contributed by Mrs. Kathleen Macy Finn; Mrs. Gene Kloss gave one of her brilliant aquatints; and Ben Messick presented two of his vigorous lithographs.

Among other accessions of importance is a miniature painting on glass, falsely attributed to Rembrandt Péale but nevertheless a painting of considerable merit. The gift of Mrs. Natal Sussanne, it represents a difficult and unusual example of miniature painting in that the subject, a classical landscape, is painted directly on the reverse side of the glass. From Earle W. Huckel the division acquired by gift 12 examples of graphic arts, the most important of which is an invitation card used by Thomas Sully. Others include seven mezzotints of prominent men of the pre-Civil War Period executed by A. H. Ritchie, from R. P. Tolman; an old-fashioned water lens and stand, from Mrs. Macowin Tuttle; an engraving of the Lord's Prayer, executed about 1862–64, in a circle 13/32-inch in diameter, from Mrs. Flora H. Wetzel; two original engraved wood-blocks by James Bann, from Miss Helen Bann; and an American wood-engraving of a religious subject printed from four color-blocks, from Jacob Kainen. The Smithsonian Institution deposited in the division the current Associate Member's print of the Society of American Etchers, "The Flight into Egypt," by Carl M. Schultheiss, A. N. N.

During the year the section of photography acquired a wide variety of pertinent material for addition to its extensive collections. The principal accession probably is the gift of Fuller & d'Albert of a collection of rare old lenses of French, English, German, and American manufacture. These were acquired over many years by the late Mr. d'Albert during the conduct of his photographic supply business. The collection includes two viewing lenses for the early type of "Mutoscope." From the Brenner Photo Co. and from E. E. Strong, Edward Strauss, and Mrs. T. J. Holzberg the section received as gifts a number of historically interesting cameras of the 1890's and early 1900's. Another valuable accession was a Beidler-Viken twin-lens camera presented by A. J. Viken. This type of camera was invented by Messrs. Beidler and Viken and was the first practical large twin-lens instrument designed especially for portraiture. It has been widely used for both home and studio work since 1923. An important addition to the motion-picture series came as a gift from

the DeVry Corporation, the first portable motion-picture projector, designed, patented, and made in 1912 by Dr. H. A. DeVry, who is often referred to as the father of visual education. George R. Goergens contributed a speeding-up mechanism for motion-picture cameras patented by him in 1919 and a tripod head geared for attachment to an ordinary camera for making panorama pictures which he invented in 1915.

Other gifts were as follows: A Wynne Infallible Exposure Meter from Oscar Ehrlich; two daguerreotypes and two ambrotypes called "Sphereotypes," patented May 27, 1856, hitherto unrepresented in the collections, from Miss Heloise Brainard; four specimens of very early motion-picture film, with bound edges, which can be projected in 50-foot lengths on an Amêt projector, one of which is in the collections, from Arthur F. Johnson; and from Mrs. Everett Tutchings, 29 portraits by her father, Pirie MacDonald, representing his work before 1900.

INSTALLATION AND PRESERVATION OF COLLECTIONS

The work involved in the installation and preservation of the collections in the department was particularly heavy as it included the unpacking and redistribution of about 2,000 specimens returned from air-raid protective storage and the processing of over 3,000 new specimens. The task was a difficult one because of the lack of help and because of the critical shortages of both exhibition and storage space. Three weeks' time of the total available manpower of the engineering division was consumed, for example, in the unpacking, assembling, and exhibition of the historic Wright airplane when it was returned from storage. Again, to obtain space in the Aircraft Building for the exhibition of the Bell jet-propelled airplane, every airplane and exhibition case had to be moved. The task consumed two weeks' time of the engineering staff, the help of four laborers, and a crew of five skilled men furnished by the Bell Aircraft Corporation. With this installation, no space remains for additional aircraft. The same critical situation exists in the department's sections of land and water transportation, textiles, chemical industries, and wood technology. Only such additions to the collections can be accepted as can be accommodated in the existing overcrowded exhibition and storage cases.

Engineering.—All specimens returned from storage were cleaned and some repaired before being placed on exhibition or in storage. As time permitted, additional exhibits were renovated, involving the cleaning and repairing of specimens and repainting case interiors. In this connection two innovations were introduced, i. e., the use of a hard enamel paint on the flat surfaces of unglazed exhibition bases, and the use of a fast-drying plastic paint on the shelves of exhibition cases. The enamel paint used in place of the customary flat finish oil

paint makes the cleaning of bases easier and provides a durable surface. The plastic interior shelf paint speeds up the job of renovation of cased exhibits in that the delays to permit ordinary oil paint to dry are eliminated. All new specimens received during the year were fully processed involving accessioning, cataloging, numbering, repairing, and placement, either on exhibition, in study collections, or in storage.

Crafts and industries.—The return of evacuated materials made necessary the reinstallation of many important specimens, including the Slater spinning frame, a model of the cotton gin from Eli Whitney, Jr., sewing-machine models, looms, and other textile machinery. One-yard record samples of textiles numbering 1,861 were unpacked, allocated, recorded, and stored for convenient reference and study. The large case showing progressive steps in the manufacture of worsted and woolen yarns was painted, the specimens were renovated, and the method of installation was improved. New parts were obtained for the demonstration braiding machine, and labels throughout the collections were improved.

An entire rearrangement was made of the oilcloth, linoleum, and carpet exhibits on the east-south range gallery to accommodate the collections relating to agriculture and foods. This over-all change provided additional space on the main floor range for the expanding handcraft textile exhibit. The major task involved in this move was the complete dismantling and reinstallation of the operating diorama depicting the production of Borden condensed milk. The diorama is 24 feet long and its scenic background was painted on one long piece of canvas. This was removed, renovated, cut into three pieces and mounted on three panels to fit the back of the triple case, and joining strips were painted to match. This unusual undertaking was accomplished under the direction of Edward A. Avery, assisted by the shops and artists of the National Collection of Fine Arts.

Six new installations and 11 reinstallations of chemical industries exhibits were made on the south gallery and the southwest court gallery. All the woods from type trees, and other wood specimens brought back from safety storage, were unpacked and returned to their original places in the collection, where they are again easily available for comparison and study. All are in good condition.

In the division of medicine and public health the major installation undertaken was the preparation of plans and the starting of construction of a full-size reproduction of an apothecary shop 1750. This is intended to accommodate and exhibit the valuable collection deposited by the American Pharmaceutical Association described earlier in this report. The shop consists of two rooms, one in which customers were met, and the other the pharmacist's study and laboratory where medicines were made. Progress has been necessarily slow in the under-

taking for it involves the accurate and faithful reproduction of a typical eighteenth-century building as well as the creation of the atmosphere of the late Renaissance period when the shop was in operation. At the close of the year the basic construction and plastering work was completed, and the completion of the shop and the installation of the collection is anticipated during the coming year.

Graphic arts.—No major changes in exhibition were made in this division during the year. The Franklin press exhibit was augmented by the inclusion of a photograph of a painting by Charles B. Mills, depicting Benjamin Franklin as a young man at work on the identical press on exhibition. In this picture one can see the press in operation and the interior of a printing establishment of that period. Franklin's early newspaper, *The New England Courant,* was moved closer to the front of the case so that it can be read more easily. Additional prints were placed in the solander cases on the shelf built two years ago in the section adjoinging the office. Twentieth-century American prints, for the most part, after matting and labeling, were added, filling three more solander cases. Thirty-four of these cases, devoted to fine prints, have now been labeled and filled. The cases stand like books on a library shelf, and their contents are readily available for examination, while receiving much better protection than in flat sliding drawers.

In the section of photography no important changes were made. Most of the available time of the associate curator was consumed in personally unpacking and redistributing the 20 boxes of specimens returned from storage, in processing new material, and in arranging and preparing a special exhibit each month during the year.

A list of the special monthly exhibitions held during the year is as follows:

GRAPHIC ARTS

July–September: Drypoints by Louis C. Rosenberg, Diana Thorne, and Walter Tittle, selected from the permanent collection of the division of graphic arts.
September: 31 prints and drawings by members of the National Association of Women Artists.
October: 29 prints by Albert Sterner, Pittsfield, Mass.
November: 40 block prints by William S. Rice, Oakland, Calif.
December: 35 drypoints in color by Mortimer Borne, Brooklyn, N. Y.
January: 96 original Christmas cards executed by artists, lent by R. P. Tolman.
February: 33 aquatints by Kathleen Macy Finn, Ardsley-on-Hudson, N. Y.
March: 34 etchings, drypoints, and aquatints by Gene Kloss, Taos, N. Mex.
April: 52 etchings and lithographs by Lester Hornby, Rockport, Mass.
May: 35 etchings and drawings by Isabel Bishop, New York City.
May: 35 etchings and aquatints by L. O. Griffith, Nashville, Ind.
June: 32 prints by contemporary American artists, selected from the permanent collection of the division of graphic arts.

PHOTOGRAPHY

July: 41 prints by Capt. Fred Willcox, Arlington, Va.
August: 106 prints by the Photographic Society of America.
September: 40 prints by John H. Vondell, Amherst, Mass.
October: 40 prints by Jerome H. Krimke, South Orange, N. J.
November: 92 prints by the National Photographic Society.
December: 10 prints by Eugene Kibbe, Elsah, Ill.
January: 87 prints by the Metropolitan Camera Club.
February: 77 prints by the American Photographic Publishing Co.
March: 30 prints by P. H. Oelman, Cincinnati, Ohio.
April: 50 prints by James H. Thomas, Oneonta, N. Y.
May: 40 prints by Charles B. Phelps, Grosse Point, Mich.
June: 50 prints by G. G. Granger, Lansing, Mich.

INVESTIGATION AND RESEARCH

Study and research are the daily requirements of the small staff of this department in order to keep abreast of the progress and developments in the wide field of technology and the applied sciences. Added to this is the time devoted daily in investigation and research to satisfy the information requested by Federal agencies and private investigators. These two major calls on the staff's time leave little to devote to other major research projects. Nevertheless, during the year the curator and assistant curator, section of textiles, continued their studies of textile-machinery developments and inventions and textile-handcraft techniques; the associate curator of woods and wood technology found time to study in detail the taxonomy and wood anatomy of certain woods to aid in their correct classification; and the head curator of the department pursued his long-range studies on details of American land-transportation developments.

The materials maintained in this department and available to all accredited investigators are grouped in five classes: Exhibited collections; collections arranged in study series; divisional and sectional technical libraries; subject files of published and original data; and subject files of photographs, drawings, and miscellaneous illustrations. During the year outside investigators, both governmental and private, used these materials, assisted by staff members. Professional weavers, textile designers, and lay students studied in detail the collections of coverlets, quilts, shawls, hooked rugs, and tapestries. Two groups of document inspectors of the Federal Bureau of Investigation received special instructions by the assistant curator in the identification of the various types of printing. Exhibited and study collections in graphic arts were used in conducting this course of instruction. Again, the data and photographic files were consulted day after day for information on a variety of subjects such as ships, woods, Colonial household implements, stipple engraving, automobiles, aircraft, history of the public-health movement, and the origin of writing. Inquiries both in person and by letter or telephone

directed to the department by Government personnel and by private individuals covered an equally wide range of subjects. Included were questions on cleaning and preserving gold braid, the manufacture of fish oils, definitions used in leather terminology, devices for testing cloth, refining of beeswax, formulas for casein paints, and luminous elements for electric lamps. In addition to these classes of assistance given by the department, the staff made many identifications of materials brought to the Museum or sent in by common carrier. These included textiles, woods, timepieces, surveying and navigation instruments, fabricated metal products, and lithographs and prints.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Materials distributed from the department consisting of specimens, photographs, drawings, and prints exceeded 3,000 items. Some 2,700 of these were contained in traveling exhibits on the graphic arts, which were exhibited a total of 26 months in 14 States. For use in war veteran educational and rehabilitation work at Walter Reed Hospital there was prepared and donated a cotton chart with a series of 18 mounted specimens and 16 illustrated booklets outlining cotton production and manufacture. During the year, too, 332 copies of drawings contained in the Historic American Merchant Marine Survey maintained by the division of engineering were furnished to private purchasers. This brings the total volume of copies distributed since 1938 to 4,311. Of the specimens loaned or donated for educational purposes, mention may be made of an original Philippine plow to the War Department Quartermaster Corps, and of a series of American war posters to the U. S. S. R. Society of Cultural Relations and Foreign Countries.

NUMBER OF SPECIMENS UNDER DEPARTMENT

Engineering	17,539
Textiles	16,986
Woods and wood technology	13,485
Chemical industries	23,308
Agricultural industries	2,267
Medicine and public health	21,423
Graphic arts, including photography	47,616
Total	142,624

DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

IN the division of history the past year was marked by a number of important acquisitions to the collections and by several noteworthy reinstallations of materials in the exhibition halls.

ACCESSIONS

The total number of accessions received was 62, aggregating 1,749 specimens.

The most outstanding addition to the art collection was a series of 48 bronze statuettes of notable contemporary American public men, made from life by the distinguished sculptor Max Kalish. About one-third life size, the statuettes show the subjects full length, with unusual detail of appearance and mannerisms. They include many of the high-ranking officials of the Government during the war year 1944—President Roosevelt and his entire cabinet, most of the war-agency administrators, and some of the leading generals and admirals—labor leaders, industrialists conspicuous in war production, and other private citizens regarded as public men. The series is entitled "The Living Hall of Washington, 1944" and was presented to the Museum by W. M. Kiplinger.

The costume collection was increased by a number of valuable additions, although many gifts had to be refused because of the limited exhibition and storage space. Ex-President Herbert Hoover presented the Museum with two gowns that were worn by Mrs. Hoover in the White House. One is a yellow taffeta dress worn when the President entertained the King of Siam in 1931, and the other is a silver-thread gown that Mrs. Hoover particularly liked.

For the same collection Mrs. Franklin D. Roosevelt presented two dresses—the Fourth Inaugural gown of mauve crepe, which she wore at the formal reception at the White House on the afternoon of January 20, 1945, and the street dress of Eleanor-blue velvet that she wore at the First Roosevelt Inaugural ceremony in 1933. The Museum now has, as gifts from Mrs. Roosevelt, gowns worn by her at three of the Roosevelt inaugural receptions.

Mrs. Hamilton Fish, Jr., presented a cape worn by the Honorable Hamilton Fish, Secretary of State of the United States, 1869–1877, in his college days in New York City in the early nineteenth century. It is a good example of a type of garment popular as a part of the men's costume of the period.

A costume doll of unusual historical interest was received from General Eisenhower. This doll was given to him by the children of Normandy in gratitude for their liberation from the Nazis. It was placed on exhibit by the division of ethnology in the Natural History Building. An infant girl doll of about 1881, dressed in the style of that year, was presented by Miss Elsie Witchen.

A very handsome Peruvian diplomatic uniform of the present day was presented by Mrs. Emerson Howe. It includes coat, breeches, overcoat, shoes, and stockings and is accompanied by two decorations, the Order of the Sun of Peru and the Order of the Crown of the Congo. Mrs. Howe also presented a diplomatic sword of the same period as the suit and a number of handsome French military swords of the early part of the nineteenth century.

Accessions to the military collections included an office desk and chair used in the European war zone by General Dwight D. Eisenhower in 1944. These were deposited by General Eisenhower. A captured German parachute was lent by Miss Elizabeth O. Cullen. Various other pieces of German and Japanese military paraphernalia were lent by the War Department.

Accessions to the naval collections included a series of 12 United States ensigns and one pennant flown by United States naval vessels during engagements with the enemy in the South Pacific Ocean and the Mediterranean Sea in 1942 and 1943, transferred from the Bureau of Ships, Navy Department. These have been placed on exhibition in the west hall of the Arts and Industries Building.

A number of interesting additions were made to the numismatic collection. These included 30 specimens of the various types of United States coins struck at the Denver, Philadelphia, and San Francisco mints during the calendar year 1944. This series included coins of the following denominations: Cent, nickel, dime, quarter, and half-dollar. These coins were transferred to the Museum from the Treasury Department. From the American Numismatic Association was received as a loan a Canadian 5-cent piece struck in 1943 bearing the following legend in Morse code: "We win when we work willingly." A silver token or medalet commemorating the airplane flight of Amelia Earhart across the Atlantic Ocean in 1928 was presented by the Whitehead & Hoag Co. A silver badge of the Fifth Universal Postal Congress, held in Washington, D. C., in 1897, and a bronze badge of the Admiral Dewey celebration held in Washington in 1899 were presented by the estate of the Honorable Joseph L. Bristow.

The philatelic collection was increased by the addition of 1,306 specimens during the year. These as usual included new issues of the United States transferred from the Post Office Department, foreign stamps from the Universal Postal Union, stamps sent direct from the

country of issue, and gifts from individuals. An item of special interest, a 2-cent, black (trial color), Navy Department stamp imperforate, was presented by Dr. Serge A. Korff, and a souvenir sheet of Chinese semipostal stamps, issued in 1944 for war-refugee relief, was a gift of H. Charles Chu and T. U. Chu. Sgt. E. B. Nasif presented a cover of the "Victory" set mailed the first day of issue, January 19, 1945, at Tacloban, Leyte, Philippine Islands, and a cover postmarked April 15, 1945, the date of the official reopening of the Manila Post Office.

INSTALLATION AND PRESERVATION OF COLLECTIONS

An important installation task accomplished during the year was the complete rearrangement of the military materials in the north hall. Uniforms in the wall cases were arranged in chronological order, and above them was hung a series of colored drawings of historic United States flags. Special attention was given also to the memorial collections of china, silverware, furniture, and costumes owned during the eighteenth and nineteenth centuries by noted American soldiers, diplomats, and statesmen. Many of these articles were owned by General and Mrs. Washington at Mount Vernon. The collection now occupies the entire west hall, except for the space devoted to mementos of the scientific careers of the Secretaries of the Smithsonian Institution.

The new series of bronze statuettes entitled "The Living Hall of Washington, 1944," already described, was installed in the costume hall. The crowded condition of this hall, as well as of others containing the historical exhibits, is becoming increasingly aggravated, until only a few of the exhibits can now be shown to advantage. There is little chance of this situation improving, however, until a new and spacious building is provided.

It is well now to record a little of the history of the evacuation of our valuable historical specimens that the war necessitated, although fortunately Washington suffered no enemy air attacks. The first plans for the evacuation of this material were made in January 1942. From March to December 1942, 14 boxes of valuable and irreplaceable historical materials were evacuated from the Museum by the staff of the division. Ten boxes were packed by James R. Sirlouis, scientific aide, and 4 by Wilbur Chapman, scientific aide. The objects chosen for evacuation included the Washington sword, uniform, and camp chest and many pieces of china, glass, and silverware owned by General and Mrs. Washington during the latter part of the eighteenth century; mementos of the careers of Presidents Thomas Jefferson, Andrew Jackson, and Ulysses S. Grant; a large series of jeweled and gold mounted military and naval presentation swords; the original Star Spangled Banner in a single box; and various types of rifles, pistols, and revolvers of technical interest. All this material was

returned to the Museum in November 1944 during the serious illness of Mr. Sirlouis. The objects were unpacked and temporarily placed in the exhibition cases. Later they were reinstalled by Mr. Sirlouis in the cases that they originally occupied. The unpacking and reinstallation of the original Star Spangled Banner constituted a special task which was accomplished by 2 carpenters with the assistance of a large crew of laborers. In all, the packing, the unpacking, and the reinstallation of these valuable and fragile materials constituted a large undertaking, and much credit must be given Mr. Sirlouis for the successful performance of this important and responsible task.

The problem of storage continues to be a serious one in the division. During the year storage materials were removed from the floor space under the east and west galleries of the northeast court to various storage rooms on the second and third floors of the north and west towers. This, however, was only a temporary expedient and did not permit proper classification of the materials. If these collections are to be properly preserved from deterioration and made available for study and use, it will be necessary to classify and rearrange them, but this cannot be done until adequate mechanical assistance, laboratory facilities, and space are available.

In the philatelic section all the exhibition series of stamps were rearranged while adding new issues—this under the direction of Mrs. Catherine Manning, philatelist, assisted by Wilbur Chapman, scientific aide. Practically all the recent issues are now on exhibit in the regular series, and stamps from enemy and enemy-controlled countries are mounted and displayed at intervals in the frames outside the cabinets. Cataloging of current specimens is practically up to date, and some further work was done on the large task of cataloging the Michel collection of postal stationery.

INVESTIGATION AND RESEARCH

The various members of the staff have each performed important tasks in connection with historical research and investigation in the fields represented by the division. The curator has added a valuable series of notes concerning coins, medals, and flags to those already assembled by him in recent years. The associate curator has made similar progress in connection with the history of arms and uniforms. Miss Margaret Brown, scientific aide, has assembled a series of notes pertaining to the White House dresses in the care of the division, constituting an admirable basis for a bulletin on this subject.

Members of the staff on various occasions assisted the War, Navy, Treasury, and Post Office Departments in connection with materials of military, naval, numismatic, or philatelic interest. Many data of this character were furnished also to individuals upon request in correspondence not accompanied by specimens. Twenty-seven lots

of material were submitted by outside agencies and individuals for identification.

EDUCATIONAL WORK

A special educational exhibit in the fields of stamps and coins was furnished the Washington Cathedral for its spring festival, May 10–12. The philatelic portion consisted of 4 frames of stamps selected to illustrate the topic "Religion on Stamps." The numismatic part consisted of 50 photographic prints of the obverses and reverses of 162 coins arranged in chronological sequence, labeled and mounted in 4 standard museum frames. In the first frame were installed 2 series of prints, 1 illustrating the first use of Christian symbols in numismatics during the reign of Constantine the Great, 307–337, and the other showing use of such symbols on Roman coins during the period from A. D. 337 to 460, during which the use of such designs became an established custom. These designs included the following subjects: The Greek cross in the field; the Latin cross in the field; the Chi-Rho on the helmet; the Iota-Chi in the field; the Chi-Rho in the field; the Chi-Rho above the labarum; the Chi-Rho on the labarum; the Chi-Rho as a type; and the Latin cross as a type. The second frame also contained two series of prints, one illustrating the use of religious designs on Roman coins during the period from A. D. 460 to 500, the other the use of religious designs on the coins of the Byzantine Empire during the period from A. D. 500 to 600. The third and fourth frames bore a series of prints illustrating the use of religious designs on modern coins from 1500 to 1800.

This exhibit proved of much interest to students of history of the Christian religion and to philatelists and numismatists as well. The first use of Christian symbols on Roman coins during the reign of Constantine the Great marked the turning away from paganism of the Roman Empire and its conversion to Christianity. It is difficult for anyone to view the photographs of these early Christian symbols on Roman coins without being moved to devote some attention to the history of Christianity and the Roman Empire. Thus these prints have both historical and inspirational value.

NUMBER OF SPECIMENS UNDER DIVISION

Art	1,641
Civil	16,270
Military	27,313
Naval	2,308
Numismatic	50,935
Philatelic	415,808
Pictorial	16,905
Total	531,180

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ACCESSIONS DURING THE FISCAL YEAR 1944–45

(Except when otherwise indicated, the specimens were presented or were transferred, in accordance with law, by Bureaus of the Government)

ABBOTT, Lt. (jg) R. TUCKER, F. P. O., San Francisco, Calif.: 36 fresh-water mollusks from the Philippines and China (169881, exchange).

ABBOTT FUND, W. L., Smithsonian Institution: 117 bird skins and 1 set of eggs, 3 muskoxen, 5 Arctic hares, 1 Arctic fox, and 3 walruses (167361); 21 skins and 2 skeletons of birds from Colombia, collected by Carlos Lehmann (169033).

ÅBERG, Dr. EWERT, Beltsville, Md.: 2 plants (170347).

ACKERLY, ERNEST, Atlanta, Ga.: Artificially deformed skull of an Indian child from Lookout Mountain Cave, Chattanooga, Tenn. (169542); 2 amphipods (169724).

ADDY, C. E., Newburyport, Mass.: 10 shrimps, 20 amphipods (167331).

ADELAIDE, UNIVERSITY OF, Adelaide, South Australia: (Through Nancy T. Burbidge) 21 grasses from Australia (170305), exchange).

AGRICULTURE, U. S. DEPARTMENT OF: (Through Dr. F. A. McClure) 3 cultivated plants from Canal Zone (170229).

Bureau of Entomology and Plant Quarantine: 495 plants collected in Texas by Ivan Shiller (162514); 32 isopods, 6 amphipods, 1 crab larva, 1 crab, 7 mollusks, 1 slug from Venezuela, 1 frog (167964, 168130, 168427, 168685, 169856); 1 blindsnake and 1 frog from Martinique (168130); 2 mollusks from Freeport, Tex. (168768); 72,000 miscellaneous insects retained by the various specialists out of material received by them for identification during the fiscal year 1944–45 (170523). (See also under C. B. Manifold.)

Forest Service: (Through W. A. Dayton) 616 plants, mostly of timber trees, collected in Ecuador (167955, 168406, 169018); 7 woody plants from Texas (168809); a grass from Louisiana (169434); 1 plant from North Carolina (170041).

Bureau of Plant Industry, Soils, and Agricultural Engineering: 1,360 plants, mostly from Brazil, collected by Dr. J. T. Baldwin, Jr., and 12 wood specimens (167807); (through Dr. Rogers McVaugh) 1 plant from Texas (169003); 30 photographs of herbarium specimens (169183); 12 plants from Costa Rica (169540); 1 plant from Alabama (169617).

ALBERTO, Brother TOMÁS, Salamina-Caldas, Colombia: 11 ferns from Colombia (168930).

ALDRICH, Dr. JOHN W., Washington, D. C.: 1 robin (170301). (See also under U. S. Department of the Interior, Fish and Wildlife Service.)

ALIEN PROPERTY CUSTODIAN, Washington, D. C.: Broken pieces of oriental carved objects in jade, carnelian, crystal, agate, etc., for mineralogical study, seized from the firm of Yamanaka & Co., New York City (166936).

ALLANSON, Sgt. HENRY E., Jr., and Corp. JAMES C. KEMP, A. P. O., San Francisco, Calif.: 132 butterflies and a few other insects from New Guinea (169517).

ALLARD, H. A., Arlington, Va.: 15 plants from Virginia (168810); 175 plants from vicinity of Washington, D. C. (169472).

ALLEE, Prof. W. C., Chicago, Ill.: 30+ amphipods (168556).

ALVARENGA, Dr. LEONIDAS, San Salvador, El Salvador: 17 insects from El Salvador (167033).

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D. C.: (Through Dr. F. L. Campbell) 2 photographs of Capt. Jacob Chaitkin, U. S. Army Air Forces (166746).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.: 11 minerals (167987, exchange); (through Dr. John T. Zimmer) 1 bird (169364, exchange).

AMERICAN NUMISMATIC ASSOCIATION, New York, N. Y.: (Through Robert H. Lloyd) 6 coins of Canada, Ceylon, and Chile and a Canadian token (167976, loan).

AMERICAN PHARMACEUTICAL ASSOCIATION, INC., Washington, D. C.: A collection of furniture, fixtures, drug bottles and jars, working implements, books, and other equipment of the

Cathedral Pharmacy, Freiburg, Germany, period of 1750, and similar specimens from other drug stores of the same period and vicinity (170211, deposit).

AMERICAN PHOTOGRAPHIC PUBLISHING Co., Boston, Mass.: 77 pictorical photographs, originals of reproductions in 1945 American Annual of Photography (169783, loan).

AMERICAN WAR MOTHERS, Indianapolis, Ind.: (Through Mrs. E. May Hahn) Gold-star flag flown on the ships that conveyed contingents of Gold Star Mothers from the United States to France and return during the period 1930–1933 (167801).

AMMON, G. A., Lansing, Mich.: 4 plants from the Aleutian Islands (168362).

ANDERSON, Dr. J. P., Ames, Iowa: 110 grasses from Alaska and Yukon (169607).

ANDERSON, J. W., Spokane, Wash.: 1 calcite geode from Orderville, Kane County, Utah (169001).

ANDERSON, LYLE. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

ANONYMOUS: Egyptian figurine of Osiris in green faience (168223); 8 bird skeletons and miscellaneous bones and 2 nests (169792); 8 specimens of Japanese currency printed for circulation in the Philippine Islands during World War II (169991); 28 bird skins (170222); 8 sets of old lens stops, used over a period of years from 1840 to 1880 up to the time of the introduction of adjustable diaphragms in lens tubes and shutters (170404); 1 pictorial photograph by Thomas W. Smillie, his initials in red in lower right corner (170531); 1 colored portrait of Secretary Samuel P. Langley (170533).

ANTHONY, LUCEY E., Swarthmore, Pa.: Gavel owned by Susan B. Anthony (166408).

APOLINAR ÁNGEL, Brother, Cartegena, Colombia: 96 plants from Colombia (169803).

APOLINAR-MARÍA, Rev. Brother, Bogotá, Colombia: 9 ferns from Colombia (169851).

APPLIN, E. R., Austin, Tex.: 55 slides of diagnostic Cretaceous and Tertiary Foraminifera from Florida, including many primary types (169156).

ARCHBOLD BIOLOGICAL STATION, Lake Placid, Fla.: (Through L. J. Brass) 24 grasses from Florida (170461).

ARCHINO, Pvt. SAMUEL P., Camp Atterbury, Ind.: 26 land and fresh-water mollusks from Camp Atterbury (168639).

ARELLANO, A. R. V., Mexico, D. F.: 24 land shells, including types of 3 new species, from State of Querétaro, Mexico (169363).

ARIZONA, UNIVERSITY OF, Tucson, Ariz.: (Through Prof. Walter S. Phillips) 21 ferns from Arizona (170232, exchange).

ARNOLD, Gen. H. H., Washington, D. C. An Arab costume presented by Abdul Aziz I'bn Saud, King of Saudi Arabia, to General Arnold, consisting of an embroidered headdress and coil, a robe embroidered in gold thread, and an inscribed sword embellished with overlay of gold and silver together with a corded sword belt (168988, loan).

AUGUSTSON, Lt. G. F., Fort Sam Houston, Tex.: 2 fleas, type and allotype (167867); 1 slide with holotype male flea (168928).

AUSTRALIAN GOVERNMENT, *Council for Scientific and Industrial Research*, Canberra City, Australia: 96 grasses from Australia and Papua (167783, exchange).

AYDELOTTE, Dr. W. D., Fairburn, Ga.: 3 barnacles (170074).

BABCOCK, Prof. E. B., Berkeley, Calif.: 110 plants (169241); 299 photographs and 1 fragment of plants (169421).

BAHOVEC, FRED, Baranof, Alaska: 18 mollusks, 2 marine invertebrates, 1 starfish, 1 ascidian, and 6 hermit crabs from Alaska (167362, 169236).

BAILEY HORTORIUM, Ithaca, N. Y.: 1 plant from Mexico (156462).

BAJKOV, Dr. A., Dayton, Ohio: 55 flies collected in Tamnak Valley, Attu Island, March 12, 1945, on the snow at a temperature of 0° C.–1° C., and 2 vials of plankton (170504).

BAKER, JAMES S. (See under Foreign Economic Administration.)

BAKER, Sgt. RAYMOND L., A. P. O., San Francisco, Calif.: 531 mollusks from the Netherlands East Indies (170486).

BALDWIN, Dr. J. T., Jr. (See under Blandy Experimental Farm.)

BALL, WILLIAM HOWARD, Brownsville, Tex.: 101 Crustacea and 21 millipedes (168072); 167 marine invertebrates, 3 echinoderms, and 10 insects (169525); 40+ invertebrates from Texas (170208).

BANGHAM, Dr. RALPH V. (See under Dr. Wilbur M. Tidd.)

BANKS, Prof. NATHAN. (See under Harvard University, Museum of Comparative Zoology.)

BANN, HELEN, Cincinnati, Ohio: 2 original engraved wood-blocks by James Bann, one a self portrait and the other a portrait of the donor (168170).

BARKER, R. WRIGHT, Houston, Tex.: (Through Dr. T. Wayland Vaughan) Foraminiferal material from approxi-

mately 20 yards above the Atlantic Coast Line Railroad bridge, on west bank of Flint River, Bainbridge, Ga. (170153): 15 slides of Lower Cretaceous larger Foraminifera from Texas (170544).

BARKLEY, Dr. FRED A. (See under University of Texas.)

BARLOW, Dr. C. H., Leonia, N. J.: 266 fresh-water and marine shells from Egypt (168991); 78 land and fresh-water mollusks and 7 fossils (6 mollusks, 1 fish) (169951); 1 mollusk from the Red Sea (170137).

BARNÉS, VENTURA, Jr., Mayagüez, Puerto Rico: 18 birds from Mona Island, Puerto Rico, including 1 type (168744).

BARNETT, Lt. HERBERT C., A. P. O., San Francisco, Calif., 1 tick from Tacloban, Leyte, Philippine Islands (168991).

BARRETT, Mrs. W. E., Greenview, Calif.: 10 amphipods (167871).

BARTLETT, Mrs. GEORGIA SLATER, and LYDIA R. SLATER, Webster, Mass.: Original indenture of apprenticeship of Samuel Slater to Jedediah Strutt, dated January 8, 1783 (169666, deposit).

BARTLEY, FLOYD, Circleville, Ohio: 37 plants, mostly from Ohio (169029)

BARTOS, Lt. WILLIAM A., F. P. O., San Francisco, Calif.: 40 shrimps, 25 crabs, 1 worm, brittle-star, octopus, mollusk, and fish, all from Saipan (168008); approximately 42 marine invertebrates, 4 brittle-stars, and 3 fishes from Saipan and Eniwetok (168584); 160 marine invertebrates, 13 echinoderms, 11 mollusks, and 12 fishes from South Pacific Islands (169259).

BARTSCH, Dr. PAUL, Washington, D. C.: 1 shrew collected in Fairfax County, Va.; by donor (168806); 1 golden-crowned kinglet (168852); 1 meadow mouse from Fairfax County, Va. (169613); partial skeleton of blue goose (169730); 1 chimney swift (170161); 1 specimen of carpenter bee, collected at "Lebanon," Fairfax County, Va., in April 1945 (170238); 2 seaside sparrows (170453).

BAUM Co., W. A., New York, N. Y.: 1 Baumanometer (No. 444634) for registering blood pressure (168968).

BAYER, Corp. FREDERICK M., Muskogee, Okla.: 35 fishes and 1 annelid from the vicinity of Sarasota, Fla. (167861); 3 brittle-stars from Palm Beach Inlet, Fla. (168298); 7 echinoderms (169906); 4 crinoids (170157); (with Corp. Gilbert Neurohr) 85 echinoderms from the reef at Sirido Village, Biak, Schouten Islands, collected in February 1945, 29 brittle-stars, 22 starfishes, 28 crinoids, 6 sea-urchins, and 25 mosses (170509).

BEALS, ROBERT V., A. P. O., San Francisco, Calif.: 215 mollusks and 26 corals, chiefly from New Guinea (168473).

BEAMER, Prof. R. H., Lawrence, Kans.: 6 bugs (169859).

BEATTY, HARRY A., Christiansted, St. Croix, Virgin Islands: Small collection of insects from Virgin Islands (151600); 6 pairs of deer antlers (168352); approximately 167 crustaceans, 3 bats, 1 brittle-star, and 8 fishes (168557).

BECKLEY, W. O., F. P. O., San Francisco, Calif.: 6 fossils and 2 minerals (167963).

BEEBE, Dr. WILLIAM, New York, N. Y.: 1 owl jaw (140039); 8 beetles (167875); 21 beetles, representing 6 species (168109).

BEGGS, J. D., Orlando, Fla.: (Through Dr. F. L. Lewton) 3 specimens of "Australian pine" wood, grown in Orange County, Fla. (170162).

BELASCO, DAVID, F. P. O., San Francisco, Calif., 1 mollusk and 1 lot of Foraminifera (169694).

BELKIN, Capt. J. N., A. P. O., San Francisco, Calif.: 107 specimens (70 adults and 37 slides) of mosquito material from Guadalcanal (170298).

BELL AIRCRAFT CORPORATION. (See under War Department.)

BENNETT, Maj. HARRY J., A. P. O., San Francisco, Calif.: 240 land and fresh-water mollusks from the Philippine Islands (170407).

BENNETT, Lt. LOGAN J., F. P. O., San Francisco, Calif.; 45 birds skins from Nissan Island (169154); 95 birds from Admiralty Islands (170422).

BERG, Lt. (jg.) CLIFFORD O., F. P. O., San Francisco, Calif.: 235+ flies, of which 135 are Stratiomyidae, including a new species, 100 or more flies of other families (169769); 77 flies collected on Guadalcanal (170042).

BERNER, Maj. LEWIS, A. P. O., Miami, Fla.: 1 bird spider from Tarkwa (168886).

BERNHARDT, ALTON, North Liberty, Ind.: 1 turkey bone from the Pleistocene of Indiana (170439).

BERQUIST, H. R., Washington, D. C.: 88 land shells from the Dominican Republican (168800).

BERRY, Dr. E. W. (See under Johns Hopkins University.)

BIBBY, Lt. (jg.) F. F., F. P. O., San Francisco, Calif.: 70 mollusks and 11 insects from the Philippines (170445).

BICK, Lt. (jg) GEORGE H., F. P. O., San Francisco, Calif.: A small collection of insects, spiders, and lizards and 1 shrimp (169265).

BINGER, ELEANOR R., Upper Marlboro, Md., and ANITA JAMES, Washington, D. C.: Sharks' teeth (about 350) collected between Chesapeake and North Beach (Stennetto's Wharf), Md. (168075).

BISHOP, ISABEL, New York, N. Y.: 13 drawings and 22 etchings for special exhibition, April 9 through May 6, 1945 (170055, loan.)

BLACK, RALEIGH A., Mont Albert, Victoria: 55 grasses from Australia (168904); 14 grasses from Australia (169868).

BLAKE, S. T., Brisbane, Queensland: 2 plants (168680, exchange).

BLANDY EXPERIMENTAL FARM, Boyce, Va.: (Through Dr. J. T. Baldwin, Jr.) 35 plants (170472).

BOEHLKE, JAMES, Buffalo, Minn.: 2 salamanders from Buffalo, Minn. (168769); 2 fishes (169913); 2 amphipods (170356).

BOGEN, Lt. Comdr. EMIL, A. P. O., San Francisco, Calif.: 3 lizards, 8 snakes, and 1 fish from Manus Island, Admiralty Islands (170465).

BOHART, Lt. GEORGE E., F. P. O., San Francisco, Calif.: A small collection of miscellaneous insects taken on Guadalcanal (169944); a collection of miscellaneous insects collected at Siota, Little Florida Island, in the South Solomons (170378).

BOLES, THOMAS. (See under U. S. Department of the Interior, National Park service.)

BORN, KENDALL E. (See under Tennessee Department of Conservation.)

BORNE, MORTIMER, Brooklyn, N. Y.: 35 drypoints in color for special exhibition from November 20 through December 17, 1944 (168953, loan); 1 color print, "The Road," by the donor, printed from 3 drypoint plates (yellow, red, and blue inks used) (170054).

BOULTER, Mrs. HARRIET K., Washington, D. C.: A negative and a transparency of the Adams Memorial statue (sometimes called "Grief") by August Saint-Gaudens, in Rock Creek Cemetery, Washington, D. C. (167950).

BOURGEOIS, MARIE E., Mixcoac, D. F.: 60 land, fresh-water, and marine shells from Mexico (167891); 228 mollusks from Mexico (169263); 6 subulinid mollusks from Huitzlahuaca Cave, Guerrero, Mexico, collected by Professor Sokoloff (170440).

BOURQUIN, Dr. FERNANDO, Buenos Aires, Argentina: 15 Lepidoptera from Argentina (168709, exchange).

BOWMAN, Mrs. GERTRUDE L. (See under Hon. Herbert Hoover.)

BOWMAN, KENNETH, Edmonton, Alberta: 1 insect (paratype) (168804).

BOWMAN, Mrs. MARIA G., Seattle, Wash.: Stone lamp from old village site on Korovin Bay, Atka Island, Alaska (168677).

BRADLEY, TOM, Washington, D. C.: 1 wood thrush and 1 flicker (170430).

BRADLEY, W. W. (See under California Division of Mines.)

BRAINARD, HELOISE, Washington, D. C.: 2 daguerreotypes and 2 ambrotypes (sphereotypes), the latter new to the collection (169340).

BRAMAN, CHESTER A., Old Chatham, N. Y.: A cane owned by President William McKinley (168579).

BRASS, L. J. (See under Archbold Biological Station.)

BRASSEUR, CHARLES L., Orange, N. J.: 1 portrait of James W. McDonough in color, McDonough process; 1 positive transparency, albumen process; 4 wet-plate stereoscopic negatives of 1860 Polar Eclipse Expedition to Labrador, 2 wax paper negatives, Le Gray process, 1 carbon print made by donor from one of above negatives; 3 metallographs, made by donor, 1888–89, carbon prints on collodion; 1 Blanquart Evrard silver print (doubtful) (170365).

BRAUN, Dr. ANNETTE F., Cincinnati, Ohio: 2 Lepidoptera (168976, exchange).

BREITGENGROSS, ALFRED T., Baltimore, Md.: 1 miniature working replica of the Stephen Daye press, the first printing press in the American Colonies, 1639, made in brass by the donor (170348).

BRENNER, RUTH M., San Francisco, Calif.: 984 samples of modern pictorial prints on cotton, rayon, and silk fabrics, classified by inspirational sources, collected in the late 1930's (168479).

BRENNER PHOTO CO., Washington, D. C.: Eastman #4 Bulls-eye camera of 1896 (168199); 1 #4 Panoram kodak of 1914 (168568); 1 Powers "Cameragraph," motion-picture projector #6, manufactured in 1906 (168814); 1 kodak developing box and tank of 1907, 1 kodak oil-burning dark room lamp (169684); 1 #2 Bullet camera, model 1898, 1 Photo-See camera, 1 Eastman film loading fixture, #4, 1 kodak film tank, 3½-inch model L–B–2 (169909).

BRIGHAM YOUNG UNIVERSITY, Provo, Utah: (Through Prof. Bertram F. Harrison) 57 plants from Utah (168657).

BRINKMAN, A. H., Craigmyle, Alberta: 6 plants from Canada (169169); grass from Oregon (169449, exchange).

BRISTOW, Estate of the Hon. JOSEPH L., Fairfax, Va.: Silver badge of the Fifth Universal Postal Congress, Washington, 1897, and a bronze badge of the Dewey celebration, Washington, D. C., 1899 (169904).

BRITISH GOVERNMENT, *British Council*, London, England: "British Crafts Exhibition," consisting of handicrafts such as needlework, books, furniture, silver, etc., temporary exhibition, May 8–28, 1945 (170686, loan).

Royal Botanic Gardens: (Through Dr. Dr. E. J. Salisbury), 3 plants from Mexico (139796, exchange).

BROOKS, A. R. (See under Canadian Government, Department of Agriculture.)

BROOKS, ST. CLAIR, Falmouth, Va.: (Through Fred B. Inglis) Fragments of dugout canoe from Rappahannock River near Falmouth (168764).

BROWER, Dr. A. E., Augusta, Maine: 35 insects, representing 5 species and including 3 topotypes of 2 species, 10 paratypes of another, and 8 specimens from the type lot of a third (170111, exchange).

BROWN, Dr. HERBERT H., Port-of-Spain, Trinidad, B. W. I.: A collection of marine invertebrates, mollusks, echinoderms, and fishes (169095).

BROWN, HUBERT H., Toronto, Ontario: 1 fern from Ontario (170268).

BROWN, Lt. K. S., Arlington, Va.: Japanese rubber hood, gloves, trousers and shoes, captured on Tarawa (168350).

BROWN, RICHARD A., College Park, Md.: A specimen of anorthosite from the "Hills of Laramie," 18 miles north of Laramie, Wyo. (168934).

BROWN, W. J. (See under Canadian Government, Department of Agriculture.)

BROWN & BIGELOW, St. Paul, Minn.: 13 calendar covers printed by offset lithography and 1 calendar printed by rotary intaglio, with reproductions of etchings by R. H. Palenske (167934).

BROWN FUND, E. J., Smithsonian Institution: 4 skins of Iceland birds of forms new to the collections (169323).

BRUNNER, Pfc. ALBERT R., A. P. O., San Francisco, Calif.: 1 beetle (169877).

BUCHHOLZ, Prof. JOHN T. (See under University of Illinois.)

BUEHLER, Capt. MILTON H., Washington, D. C. (See under War Department, Army Medical Museum.)

BULLOCK, D. S., Angol, Chile: 34 Lepidoptera from Chile (170045).

BUNTON, PAUL B., Atlanta, Ga.: 4 cross sections of a quartz crystal, probably from Brazil (170292).

BURBRIDGE, NANCY T., Adelaide, South Australia: 14 grasses from Australia (168670, exchange). (See also under University of Adelaide.)

BURCH, JOHN Q., Los Angeles, Calif.: Holotype of 4 species of marine shells from southern California and Mexico (170185).

BUREN, WILLIAM F., Alexandria, La.: 188 ants, representing 52 species (169146, exchange).

BURKE, Corp. JAMES PAUL, A. P. O., San Francisco, Calif.: 115 Lepidoptera (168322); 94 butterflies from the Lunga District, Guadalcanal, Solomon Islands (169518); 100 Lepidoptera from Guadalcanal (170525).

BURTON, R. E., F. P. O., San Francisco, Calif.: 28 plants from the South Pacific (168111); 40 plants (grasses and sedges) from South Pacific Islands (168789).

BUSS, IRVEN, A. P. O., San Francisco, Calif.: 1 swallow (169099);

BUTLER UNIVERSITY, Indianapolis, Ind.: (Through Dr. J. E. Potzger) 190 grasses from Indiana (168545, 168712, exchange); 3 grasses from Indiana (169327, exchange).

BUTTS, CHAUNCEY L., Fairfax, Va.: Specimen of gold ore from Independence mine, Talkeetna Valley, Alaska, and 3 specimens of obsidian from Amchitka Island, Alaska (168161).

CABALLERO y C., Dr. EDUARDO, Chapultepec, D. F.: Cotype of parasitic worm (168285).

CABRERA, Dr. ÁNGEL L. (See under Museo de La Plata.)

CALHOUN, JOHN B., Columbus, Ohio: 2 bird skins (168693).

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: (Through Dr. Wilbert M. Chapman) 4 paratypes of fishes, collected at Santa Isabel, Rio Negro, Amazonas, Brazil, January 14, 1925, by Carl Ternetz (168959, exchange); (through Dr. Robert T. Orr) 1 brown pelican (169168, exchange); 54 plants from California (169322, 169819, 170206, exchange); (through Dr. L. G. Hertlein) 6 brachiopods from California (169414); 746 plants, mostly from Mexico and western United States (169521, exchange); 30 fresh-water fishes from South America (107273, exchange).

CALIFORNIA DEPARTMENT OF AGRICULTURE, Sacramento, Calif.: A weedy plant from California (168499).

CALIFORNIA DIVISION OF FISH AND GAME, Terminal Island, Calif.: (Through the Scripps Institution of

Oceanography) 1 bramble shark (169135).

CALIFORNIA DIVISION OF MINES, San Francisco, Calif.: (Through W. W. Bradley) 5 specimens of natrolite from Clear Creek, San Benito, Calif. (168389).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.: 339 plants, mostly from California and Oregon (169230, exchange).

Museum of Vertebrate Zoology: (Through Prof. Alden H. Miller) 8 birds, representing 5 races (170492, permanent deposit).

CALIFORNIA, UNIVERSITY OF (AT LOS ANGELES), Los Angeles, Calif.: (Through Dr. Ralph H. Smith) 8 amphipods (170033).

CAMARGO, Dr. FELISBERTO. (See under Instituto Agronómico do Norte.)

CAMPBELL, DAN S., (See under Campbell Products.)

CAMPBELL, DR. F. L. (See under American Association for the Advancement of Science.)

CAMPBELL PRODUCTS, Owensboro, Ky.: (Through Dan S. Campbell) Study samples of fiberglas thread and 2 types of fireproof fabrics of fiberglas and asbestos yarns, and a specimen illustrating the use of these in a side section of the Tail Wheel Boot for a P–47 Thunderbolt plane (168567).

CANADIAN GOVERNMENT, *Department of Agriculture, Division of Entomology*, Ottawa, Canada: (Through Dr. H. H. J. Nesbitt) 3 mites on 1 paratype slide (169238); (through W. J. Brown) 4 beetles, paratypes (169295, exchange); (through A. R. Brooks) 3 flies, including 2 paratypes (169729); (through A. R. Brooks) 8 flies, paratypes of 3 species (169814).

CANFIELD FUND, Smithsonian Institution: 1 beryl crystal from Pala, Calif. 168160); 10 tantalite crystals from Cera, Parahiba, and Minas Gerais, Brazil (168882); 1 colorless spodumene crystal and 1 cut stone of spodumene (169181); a specimen of brazilianite from near Arrasuahý, Conselheira, Pena District, Minas Gerais, Brazil (170293).

CANNON, Dr. J. N., Seldovia, Alaska: 2 pelecypods, from Snug Harbor, Alaska, from Jurassic rocks; also a native moosehide handbag with beaded eagle emblem (170020).

CAPRILES, JENARO MOLDANADO. (See under Federal Security Agency, U. S. Public Health Service, San Juan, Puerto Rico.)

CARDENAS, Dr. MARTÍN, Cochabamba, Bolivia: 110 mollusks from Lake Poopo, Bolivia (167809); 109 plants from Bolivia (168095); 27 plants from Bolivia (169123).

CARDER, ROBERT. (See under Charles F. Jones.)

CARNEGIE MUSEUM. (See under National Geographic Society.)

CARPENTER, Mrs. J. S., New York, N. Y.: U. S. Naval officer's uniforms of the period about 1935 (169728).

CARPENTER, Maj. STANLEY J., Fort McPherson, Ga.: 187 adult mosquitoes, representing 43 species, collected in the southern United States (168049); 75 specimens of mosquito larvae on slides, comprising 7 species, collected in Guadalcanal (168828); 388 slides of mosquito material representing 40 species occurring in the southeastern United States (169110); 7 slides of mosquito material (170467).

CARPINTER FAMILY. (See under Dr. Milton Carpinter Cobey.)

CARR, A. T., Port-of-Spain, Trinidad, B. W. I.: 1 otter skull (165357).

CARTER, DEWITT W., Washington, D. C.: 2 flies (169147).

CASSELL, Sgt. JOSEPH F., A. P. O., San Francisco, Calif.: 25 reptiles and amphibians from New Guinea, also 1 scorpion (167459).

CASTELLO, Maj. ROBERTO LEVI, Guayaquil, Ecuador: A small collection of mosquitoes (168173).

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C.: (Through Rev. Hugh O'Neill) Cultivated plant (168053).

CAVALIER CORPORATION, Chattanooga, Tenn.: 2 cedar chests, one a "Stowaway," faced with Honduras mahogany veneer, and the other conventional, faced with primavera and aspen crotch veneers (168970, exchange).

CERNY, JOSEPH J. (See under Anthony Kovarik.)

CERTIFIED GAUGE & INSTRUMENT CORPORATION, Long Island City, N. Y.: 1 4½-inch Certified pressure gauge used for indicating the pressure of steam, air, water, and other fluids (168337).

CHAMBERLAIN, Dr. JOSEPH C., Palmer, Alaska: 91 beetles collected in Alaska (168760).

CHANDLER, Pvt. PERCY A., A. P. O., New York, N. Y. (See under War Department, Army Medical Museum.)

CHAPIN, Dr. EDWARD A., Washington, D. C.: 4 crayfishes from Lake Garfield, Mass. (168225); 40 mollusks from Lake Garfield, Monterey, Berkshire County, Mass. (168958).

CHAPMAN, Dr. WILBERT M. (See under California Academy of Sciences.)

CHARLESTON MUSEUM, Charleston, S. C.: Fossil bird bone (tarsometatarsus) from near Drum Island, Cooper River, Charleston, S. C. (166377).

CHASE, Mrs. AGNES, Washington, D. C.: 17 grasses (167929); 46 grasses from Australia (168068); 37 plants from Australia (168167); 67 grasses (168679); 102 South American grasses of the Second Goodspeed Expedition of the University of California (168-942); 12 plants from British Guiana (169435).

CHATHAM, C. F., San Francisco, Calif.: 1 synthetic emerald (168609).

CHEN, SUI FONG, Washington, D. C.: 77 mollusks from northern Alabama (169676); 180 specimens of land and fresh-water snails from northern Alabama (170186); 70 mollusks from Alabama and 5 vials of insects, ectoparasites, from rats collected in Chicago, 1943 (170542).

CHICAGO NATURAL HISTORY MUSEUM, Chicago, Ill.: 66 photographs of ferns from Peru (86423, exchange); 69 plants (cellular cryptogams) (168-482, exchange); 25 plants from Hawaiian Islands (169761, 170346, exchange).

CHU, H. CHARLES and T. U., Washington, D. C.: 6 Chinese souvenir postage stamps (169858).

CIVILIAN DEFENSE, *Sector Post I, Zone E, Area 47*, Washington, D. C.: (through Hayner H. Gordon) Air-raid warden's equipment of the period of World War II, 48 specimens (170295).

CLARE, STEWART, Kansas City, Mo.: 20 miscellaneous insects (169807); 4 insects (170099).

CLARK, AUSTIN H. (See under Dr. Lawrence I. Hewes.)

CLARK, Prof. W. MANSFIELD. (See under National Research Council.)

CLAUSEN, Prof. ROBERT T., Ithaca, N. Y.: 19 plants (168481, exchange).

CLEMENT, Rev. Brother, Santiago de Cuba, Cuba: 98 plants from Cuba (168363, 168872, 169287).

CLEVELAND, Mrs. GERTRUDE O. S., Quinebaug, Conn.: Homespun cotton quilt with block-printed chintz top and a hand-woven overshot weave coverlet, both made before 1803 on the Corey farm in Plainfield, Conn., by Abbie Corey Brackett (1782–1880); also a pieced silk quilt in the "Crazy Patch" pattern made in 1888 by the donor, her mother, Mrs. Gertrude Olney Stevens, and her sister, Celia Campbell Stevens (169638).

COBEY, Dr. MILTON CARPINTER, Washington, D. C.: (Through the Carpinter family) 2 porcelain medicine spoons (169698); an old household drug and spice mill (170039).

COCHRAN, Dr. DORIS M., Washington, D. C.: 1 turtle, 1 salamander, 3 crayfishes, and a small collection of insects from Adams County, Pa. (167889); 1 cultivated plant (170230).

COCKERELL, Prof. T. D. A., Boulder, Colo.: 222 insects, mostly bees (167840).

COLBURN, BURNHAM S., Biltmore, N. C.: 7 lots of hiddenite, including 4 large individuals, and 1 cyanite from North Carolina (170138).

COLLINS, LEE R., Knoxville, Tenn.: Cast of fossil tooth, original of which was found in cave near Bulverde, Tex. (167941).

COLLINS, W. N. (See under Charles F. Jones.)

COLORADO STATE COLLEGE, Fort Collins, Colo.: (Through Prof. H. D. Harrington) 1 grass from Colorado (169172).

COLUMBIA INSTITUTION FOR THE DEAF, Washington, D. C.: About 3,900 mollusks (168194).

COMISIÓN DE BOTÁNICA, Cali, Colombia: 125 plants from Colombia (167564, exchange); (through Dr. J. Cuatrecasas) 157 plants from Colombia (168784, exchange); 368 plants from Colombia (168849, exchange); (through Dr. J. Cuatrecasas) 179 plants and 1 palm from Colombia (168910, 170421, exchange).

COMMERCE DEPARTMENT OF, *Metals Reserve Company*, Washington, D. C.: A quartz crystal, weight 5.7 pounds, from Ashe County, N. C. (168686).

COMMERFORD, LESTER E., Washington, D. C.: 1 cedar waxwing (169935).

CONOVER, WILLARD D., A. P. O., San Francisco, Calif.: 8 butterflies (4 duplicates and 4 unique) (168508).

CONSTANTINE, DENNY, Los Angeles, Calif.: 4 bats from Azusa, Calif., and 6 from Concan, Tex. (168730, exchange).

CONWELL, L. A., F. P. O., San Francisco, Calif.: A small collection of miscellaneous insects, spiders, lizards, crabs, hermit crabs, and mollusks from the South Pacific (169015, 169134, 169220, 169225, 169256, 169331, 169351, 169531, 169691, 169745).

COOK, HAROLD J., Agate, Nebr.: 5 pelecypods from "Old Woman Creek Anticline," eastern Wyoming (170409).

COOLEY, Dr. R. A. (See under Federal Security Agency, U. S. Public Health Service, Hamilton, Mont.)

COOPER, Dr. G. ARTHUR, Washington, D. C.: 1 specimen of Devonian brachiopod containing unusual color marks (169853).

COOPER, Prof. KENNETH W., Princeton, N. J.: 35 beetles from Barro Colorado Island, Canal Zone (169239); (through Dr. M. R. Smith) a small collection of insects, mostly beetles (170188).

COPELAND, Lt. R. A., Jr., F. P. O., San Francisco, Calif.: 19 plants from the Philippine Islands (170109).

CORE, Prof. EARL L. (See under West Virginia University.)

CORNELL UNIVERSITY, Ithaca, N. Y.: (Through Dr. Henry Dietrich) 8 flies comprising 4 paratypes each of 2 species (169933, exchange); 1 slide of insect material (169934, exchange).

CORNER, Prof. GEORGE W., Baltimore, Md.: 1 cuscus from the Admiralty Islands, collected by Dr. G. W. Corner, Jr. (169000).

COVILLE, Mrs. F. V., Washington, D. C.: A collection of baskets from western Indian tribes, a powder flask, and a shot flask (170195).

COYLE, JOHN. (See under James Mayer.)

CRAIGHEAD, Lt. (jg) FRANK. (See under Navy Department, U. S. Naval Air Station.)

CRAM, Dr. ELOISE B. (See under Federal Security Agency, Public Health Service, National Institute of Health.)

CRANS, EMMA CORNELIA, Washington, D. C.: (Through Grace M. Denison), knitted cover for horse's ears, ca. 1900 (169231).

CROCKETT, Dr. R. L., Oneida, N. Y.: 7 plants from Texas (164975).

CRONHEIM, S. P., Atlanta, Ga.: 10 specimens of muscovite and biotite crystals from Mitchell-Creek mica mine, Upson County, Ga. (168801, exchange); 41 specimens of muscovite mica from same locality (169415).

CROSS, RICHARD. (See under Lloyd F. Gunther.)

CROSSETT, EDWARD C., Wianno, Mass.: 6 pictorial photographs (168007).

CROWN FASTENER CORPORATION. (See under Spool Cotton Co.)

CUATRECASAS, Dr. J. (See under Comisión de Botánica.)

CULLEN, ELIZABETH O., Washington, D. C.: (Through J. E. Graf) German parachute with carrying case, inspection booklet, and certificate of authenticity (168995).

CURTISS, ANTHONY, Port-au-Prince, Haiti: A small collection of miscellaneous insects from Haiti (167873); 122 reptiles and amphibians, 50 fishes, 5 mammals, 10 mollusks, 1 parasitic worm, 22 marine invertebrates, and a small collection of insects (167978); 90 reptiles and amphibians, 18 fish, 154 insects, 18 mollusks, and 2 mammals from Haiti (169732).

DAHLGREEN, CHARLES W., Oak Park, Ill.: 76 etchings and drypoints by the donor (170141).

DAILY, Mrs. F. K., Indianapolis, Ind.: 1 plant from Indiana (169296).

DANIEL, Brother, Medellín, Colombia: 85 plants from Colombia (168399, 168902, 169615).

DANTE, JOHN, Austin, Tex.: Mounted skeleton of striped bass, skeletonized by the donor (168226).

DAVIS, Maj. H. A. (See under War Department, Army Medical Museum.)

DAVIS, HELEN EDITH, Stillwater, Okla.: (Through Prof. R. Chester Hughes) 7 slides of helminths, including type and paratypes of a new species (168212).

DAYTON, W. A. (See under U. S. Department of Agriculture, Forest Service.)

DEAN, G. B., Collegedale, Tenn.: 1 bug (168518).

DEARING, PAUL, Washington, D. C.: 1 Devonian coral from Williamsburg, N. Y. (167920).

DECASTRO, Hon. MORRIS F., St. Thomas, Virgin Islands: 2 pieces of wood containing approximately 20 marine borers (169108).

DEGENER, OTTO, New York, N. Y.: 1 nematode (168656).

DEIGNAN, H. G., Washington, D. C.: 143 bird skins, 7 bird skeletons, mammals, insects, reptiles, snails, worms, and shells (169226); 236 land, freshwater, and marine shells and some barnacles from Ceylon (170508).

DENISON, GRACE M. (See under Emma Cornelia Crans.)

DENNING, D. G. (See under Federal Security Agency, Public Health Service, New Orleans, La.)

DENSMORE, FRANCES, Red Wing, Minn.: Columbia gramaphone, 1908, with 8 cylindrical records, some blank and some with recorded Indian songs, and several spare parts (167996).

DESIGN CENTER, INC., New York, N. Y. (Through Louis Pfohl) A recognition model of the Russian heavy bomber TB-7, 1942 (168227).

DEVRY CORPORATION, Chicago, Ill.: 1 No. 1 DeVry portable suitcase motion-picture projector (170266).

DEWOLF, EDWARD, Washington, D. C.: 1 Prosch "Athlete" high-speed camera shutter (169620).

DIAMANT TYPOGRAPHIC SERVICE, INC., New York, N. Y.: 3 miniature books printed by the donor and known as the "Diamant Classics"—"On the Typographic Beam," by George F. Trenholm; "Why Go Modern?" by Frederic W. Goudy; and "The Art of Printing," by Stanley Morison (170567).

DICKASON, DR. F. G., Wooster, Ohio: Plant from India (169229).

DICKERMAN, Dr. E. E., Bowling Green, Ohio: Type and paratype of trematode (168738).

DIETRICH, Dr. HENRY, Ithaca, N. Y.: 4 beetles (168614). (See also under Cornell University.)

DIGEMMA, JOSEPH P., Brooklyn, N. Y.: 3 relief prints by the donor made from plaster blocks, a new process developed by the artist: "The Farmer," "The Old Barn," and "Farm in Vermont," a color print; 1 relief print by the donor, "Semper Paratus," made from a rubber surface (170259).

DISTRICT OF COLUMBIA. *Public Health Office*, Washington, D. C.: 1 pine mouse collected in the District of Columbia (170529).

DODGE, HAROLD R., Macon, Ga.: 40 species of mosquito larvae, melanistic form (169883).

DODGE, HENRY, Clearwater, Fla.: 3 marine shells from Sulu Islands, Philippines (165665).

DONALDSON, R. S., Stockton, Calif.: 1 pair of women's gloves, fancy gauntlet type, of black leather that has been treated by a preserving process using linseed oil (168208).

DORSEY, H. W., Washington, D. C.: 2 skulls of the redhead duck (168853); 2 skulls of canvasback ducks (169337).

DOUGHERTY, ELLSWORTH C., Berkeley, Calif.: 2 slides containing type and paratype of a nematode (169116).

DOUGLAS, JAMES STUART, WALTER DOUGLAS, and Mrs. ARCHIBALD DOUGLAS, New York, N. Y.: The Dr. James Douglas collection of copper minerals from Bisbee, Ariz., and the T. Sterry Hunt collection of minerals (168003).

DRAKE, Prof. CARL J., Ames, Iowa: 3 bugs (166778, exchange); 10 bugs (169685); 6 bugs representing 4 species and including 2 paratypes of 1 species and 1 paratype each of 2 other species (169901).

DRELESKY, Capt. E. A., A. P. O., New York, N. Y.: 2 plants from Assam (170174).

DROUET, Dr. FRANCIS, Chicago, Ill.: 15 plants from Plummers Island, Md., and the adjacent area (170431).

DRYANDER, Mrs. EDITH, Cali, Colombia: 76 plants from Colombia (169785).

DUCHANOIS, F. ROBERT, Corpus Christi, Tex.: 2 western coral snakes, from Corpus Christi (168441).

DUCKWORTH, A. S., Cape Girardeau, Mo.: 1 slide of Foraminifera (169588).

DUKE UNIVERSITY, Durham, N. C.: 19 ferns from Puerto Rico (169669, exchange).

DYAS, ROBERT JOHN (deceased), Bellevue, Iowa: Stone ax found on October 12, 1912, north of the town limits of Bellevue, Jackson County, Iowa, by the donor (168726).

EAGLE-OTTAWA LEATHER Co., Grand Haven, Mich.: 47 swatches, 12 by 18 inches, of full topgrain leathers of various weights, colors, and finishes (169088).

EATON, ALLEN, New York, N. Y.: Copy of an old hand-operated roller cotton gin that is still being used by Mrs. William Martin, who lives near Murphy, N. C. (169142).

EDISON, THOMAS A., INC., West Orange, N. J.: "Ediphone" Dictating and Transcription Machine Unit consisting of: 1 Edison Miracle Model Executive Dictating Machine and accessories, Serial No. D–533670, 1 Edison Miracle Model Secretarial Transcribing Machine and accessories, Serial No. T–533949 (170053).

EDNER, ORVILLE R., Campbell, Minn.: (Through Robert Teeters) Molar tooth of fossil elephant and fragmentary human skull, lower jaws and 2 long bones of more than one individual (168001).

EDWARDS, Lt. WILLARD E., A. P. O., San Francisco, Calif.: 1 egg of the Laysan albatross (170038).

EHRLICH, OSCAR, New York, N. Y.: A Wynne Infallible exposure meter (168863).

EISENHOWER, Gen. DWIGHT D., New York, N. Y.: Chair and desk used by General Eisenhower in the war zone (168675, deposit); baby girl doll dressed in Breton costume presented to General Eisenhower by the people of Brittany as a token of appreciation to the children of America for the assistance of the United States during World War II, and an illustrated pamphlet entitled "Les Poupées de Bretagne" (168860).

ELLIS, T. K., Orangeburg, S. C.: 59 marine invertebrates, 60 mollusks, 3 fishes, and 50 insects (169073).

EMMONS, Dr. C. W. (See under Federal Security Agency, Public Health Service, National Institute of Health.)

ENGINEERING & RESEARCH CORPORATION, Riverdale, Md.: 1 "Compreg" airplane propeller blade (169090); sample of "Compreg," a high density plywood (169228).

ENGLISH, G. H., Philadelphia, Pa.: Ammeter (Ampermemeter), Queen & Co., Philadelphia, Pa., Serial No. 67G, taken from Niagara Falls Steam Plant (169945).

ESCUELA SUPERIOR DE AGRICULTURA TROPICAL, Cali, Colombia: 44 plants from Colombia (168835, exchange).

EUREKA MICA MINING Co., Albuquerque, N. Mex.: (Through N. W. Sides) Several cleavage pieces of

muscovite from Eureka mica mines, 4 miles from Petaca, Rio Arriba County, N. Mex. (170187).

EWY, ETHEL E., Whittier, Calif.: 197 crustaceans from California (167520).

FAIRCHILD, Capt. GRAHAM, Ancon, Canal Zone: (Through Dr. J. P. E. Morrison) 3 land shells from Panama (168824).

FALKENAU, JANET S., Pelham, N. Y.: About 4,000 marine shells from Clearwater, Fla. (167870).

FARGO, WILLIAM B., Pass-a-Grille Beach, Fla.: 38 marine mollusks from Pass-a-Grille Beach (169882).

FAULL, Prof. J. H. (See under Harvard University, Arnold Aboretum.)

FEDERAL SECURITY AGENCY:

Public Health Service, National Institute of Health, Bethesda, Md.: (Through Dr. Eloise B. Cram) 191 mollusks (168582, 168601); 64 freshwater snails (169082); 84 freshwater snails (169968); (through Dr. C. W. Emmons) 1 plant from Montana (169045).

Public Health Service, Hamilton, Mont.: (Through Maj. William L. Jellison) small collections of insects including material from Assam, western Montana, and California (168050, 168620, 169848); (through Maj. William L. Jellison and Dr. H. B. Mills) 2 bugs, infesting bats, and 4 land snails from Birch Creek, Mont. (168871); (through Dr. R. A. Cooley) 7 ticks, including paratypes of 6 new species (169058, 170156, 170299); 29 flies reared in Montana (169397); 4 bugs from a bat-infested cabin at Lakeside, Flathead Lake, Flathead County, Mont. (169791); (through Maj. Glen M. Kohls) 7 frogs, 1 lizard, 1 snake from New Guinea, collected by Major Kohls (170256); 1 coypu trapped in the wild near Corvallis, Ravalli County, Mont. (170260); 1 abnormally colored muskrat trapped in small pond near Charlo, Lake County, Mont., in winter of 1943–44 (170369).

Public Health Service, New Orleans, La.: (Through D. G. Denning) 4 specimens of mosquito material comprising female, male and male slide, and larva (170110).

Public Health Service, San Francisco, Calif.: A collection of approximately 400 specimens of fresh-water oligochaetes, in part studied by the late Gustav Eisen (167888, deposit); (through F. M. Prince) 5 slides of insects, all paratypes (170086).

Public Health Service, San Juan, P. R.: (Through Harry D. Pratt) A small collection of insects taken by Mr. Pratt and J. Maldonado on El Yunque, P. R., at elevation of 2,000 feet (168222); (through Jenaro M. Capriles (19 fleas collected in Puerto Rico (168321); (through Harry D. Pratt) collection of miscellaneous insects from Puerto Rico (169398).

Public Health Service, Washington, D. C.: 1 rodent from Egypt collected by Dr. Barlow (168761); (through Dr. Newell E. Good) 130 mosquitoes from the District of Columbia (169418).

FEIS, Mrs. HERBERT. (See under Mrs. Joseph Stanley-Brown.)

FENNAH, R. G., Castries, St. Lucia, B. W. I.: 3 vials of insects collected in the British West Indies (167921); 1 insect (holotype) (169044).

FERNALD, Prof. H. T., Winter Park, Fla.: 311 identified sphecoid wasps including 29 types of various grades (169813).

FIELD, T/4 WILLIAM D., A. P. O., San Francisco, Calif.: A collection of miscellaneous insects, including 1 cigar-boxful of butterflies, from the Hawaiian Islands, mostly from Oahu (170297).

FIERCE, MAUDE M., Washington, D. C.: Embroidered linen splasher worked in crewel or outline stitch with Turkey red cotton, about 1880 in Hamden, Ohio, by Mrs. Naomi C. Wilson, aunt of the donor (170257).

FIGGINS, Dr. J. D. (deceased), Lexington, Ky.: (Through Dr. F. H. H. Roberts, Jr.) Skull and a few fragments of bone found near Folsom, N. Mex., about 1935 (169681).

FINCHER, J. A., Jackson, Miss.: 5 groups of the hydroid stage and 8 medusae of fresh-water jellyfish (168625).

FINN, Mrs. KATHLEEN MACY, Ardsley-on-Hudson, N. Y.: 33 aquatints for special exhibition from January 15 through February 11, 1945, the work of Mrs. Finn (169320, loan); 4 prints, made by the donor, as follows: "Yellow Head" and "Siskins," aquatints in color, "Saguenay Shore," soft-ground etching, and "Woolly Head," lift-ground etching (169798).

FISH, Mrs. HAMILTON, Jr., Washington, D. C.: Cape owned and worn by the Honorable Hamilton Fish, statesman, during the early part of the nineteenth century (169021).

FISHER, Dr. A. K., Washington, D. C.: 72 photographs of naturalists (170580).

FISHER, GEORGE L., Houston, Tex.: 63 plants from Mexico (168443).

FLEETWOOD, RAYMOND J., Round Oak, Ga.: 1 Bachman shrew (168339).

FLEMING, Mrs. ROGER, Refugio, Tex.: 1 beetle (firefly) collected in Texas (170503).

FLORIDA, UNIVERSITY OF, Gainesville, Fla.: (Through Dr. A. N. Tissot) 1 beetle (169841).

FLORIDA AGRICULTURAL EXPERIMENT STATION, Gainesville, Fla.: (Through Dr. A. N. Tissot) 11 slides of aphids, including holotype and morphotype slides of 2 species (168239); 3 specimens of insects comprising 2 moths and 1 hymenopterous parasite of the moth (168366).

FLOWER, Dr. ROUSSEAU H., Albany, N. Y.: 1 Upper Ordovician mollusk (167814).

FOREIGN ECONOMIC ADMINISTRATION, Washington, D. C.: (Through James S. Baker) 5 specimens of cassiterite, tantalite, zinc, and muscovite from Madagascar and Brazil (168803); (through Arthur T. Semple) 87 plants, mostly grasses from Ethiopia (168903); 50 plants from Ethiopia (170196).

FORSBERG, G. W., Washington, D. C.: A single-cylinder, vertical-piston valve steam engine, ca. 1900 (168843).

FOSHAG, Dr. W. F., Washington, D. C.: 18 shells from Michoacán and Guerrero, Mexico (168093); 8 recently woven decorative pouches from the Otomi Indians of four ranchos or villages in the State of Hidalgo, Mexico (168808).

FOSTER, MARK M., Denio, Oreg.: Fossil hazelnut and 58 specimens of fossil woods from Virgin Basin, Nev. (168357).

FOWLER, HARLAN D., Whittier, Calif.: A model of a Lockheed airplane, "Constellation" (1944), equipped with movable Fowler flaps (169861).

FRANKLIN, J. MORTON, West Falls Church, Va.: 2 plants from vicinity of Washington, D. C. (170178).

FRASCHE, DEAN, Washington, D. C.: A collection of chromite crystals from the Sierra Chrome Mines, Ltd., Sierra Leone, Africa (170294).

FRENCH, FRANKLIN C., Camp Swift, Tex.: A small collection of invertebrates, comprising barnacles, amphipods, isopods, hermit crabs, a polychaete worm, and mollusks collected at Kiska, Alaska, September 1943 (168548).

FREY, Dr. DAVID G. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

FROST, Prof. S. W., Arendtsville, Pa.: 3 flies representing 2 species, 1 by the type and the other by 2 paratypes (169581).

FULLER & D'ALBERT, Washington, D. C.: Collection of lenses and cameras, accumulation of past 20 years (168404); 2 viewing lenses for Motuscope (169908).

FULLING, Lt. JOHN H. (See under Smithsonian Institution, National Zoological Park.)

GALLEGO, F. LUIS, Medellín, Colombia: A small collection of miscellaneous insects from Colombia (166604).

GALVAO, Dr. A. L. A., São Paulo, Brazil: 3 slides of mosquitoes (167922).

GAMEWELL Co., Newton Upper Falls, Mass.: Original fire alarm in street box installed in Boston, Mass., in 1851 (169789).

GARCÍA Y BARRIGA, Dr. HERNANDO. (See under Instituto de Ciencias Naturales.)

GATES, PHILIP W., Rockville, Md.; 8 specimens of muscovite mica from New Hampshire (168005); 24 specimens of muscovite from various localities in New Hampshire (168628).

GIBBS, ROBERT, Chevy Chase, Md.: 1 black-billed cuckoo (170573).

GILBERT, NEAL, F. P. O., San Francisco, Calif.: 33 plants from Oahu, T. H. (169388).

GILMORE, Dr. RAYMOND, Washington, D. C.: (Through the Pan American Sanitary Bureau) 12 rats, 5 guinea-pigs, and 2 frogs (168754).

GINSBURG, ISAAC. (See under Department of the Interior, Fish and Wildlife Service.)

GIVLER, Prof. JOHN PAUL, Greensboro, N. C.: 1 bookplate designed by Dr. Clyde E. Keeler and printed by halftone letterpress (168202).

GODDARD, ARCHIBALD N., Detroit, Mich.: 1 gold crystal, locality unknown, and 1 specimen of opal in the matrix from Carbanera mine, Guerrero, Mexico (168745).

GOERGENS, GEORGE R., Washington, D. C.: 1 speeding-up mechanism for motion-picture photography, patented April 1, 1919, 1 tripod head geared for making panorama pictures with an ordinary Kodak, 1915, and 1 photostat description of the donor's time-lapse or interval motion-picture camera from *Motion Picture World*, January 24, 1920 (170487).

GOFF, DEAN S., Elgin, Ill.: Bowl of tripod effigy vessel and obsidian flakes found by donor in 1899 in State of Puebla, Mexico (170173).

GOLDBERG, LOUIS, Norwich, Conn.: 4 pairs of ice skates (168402).

GOLDMAN, Maj. E. A., Washington, D. C.: 4 land shells from Dijon, France (168620).

GOOD, Dr. NEWELL E. (See under Federal Security Agency, Public Health Service, Washington, D. C.)

GOODYEAR TIRE & RUBBER Co., INC., Akron, Ohio: 2 pneumatic life rafts of synthetic rubber, with the contractor's emergency equipment usually supplied therewith (169089, loan).

GORDON, HAYNER H. (See under Civilian Defense, Sector Post I, Zone E, Area 47.)

GOTTSCHALK, CARL W., Salem, Va.: 1 butterfly from Virginia (168613).

GOUDEY, HATFIELD, Yerington, Nev.: 1 specimen of thulite (168390).

GOULD, Prof. FRANK W., Tucson, Ariz.: 332 plants from the western United States (168308, exchange); 193 plants (169280, exhcange).

GOULD, HARRIS P., Washington, D. C.: 1 pair of steel spectacles, period of 1800, and 1 pair of silver spectacles, period of 1850 (168566).

GRAF, J. E. (See under Elizabeth O. Cullen.)

GRAFF, Col. THEODORE Q., Ada, Ohio: Camel bell (170202).

GRAHAM, Capt. OWEN H., A. P. O., San Francisco, Calif.: 74 specimens of insects from New Guinea (168851).

GRANGER, G. G., Lansing, Mich.: 50 pictorial photographs exhibited during June 1945 (170433, loan).

GRANT, Corp. NORMAN F., A. P. O., San Francisco, Calif.: Small collection of insects from southwest Pacific Islands (168336).

GREEN, IVAN J., St. John's, Newfoundland: 1 grass (168996, exchange).

GREEN, J. W., Easton, Pa.: 25 beetles, including 17 representing 2 species, probably new (169716, 169995). (See also under G. Stace Smith.)

GREENE, GEORGE M., Harrisburg, Pa.: 2 flies, 1 weevil, and 3 beetles (168297).

GREENFIELD, RAY, Washington, D. C.: 9 amphipods (169810).

GREGG, Dr. ROBERT E., Boulder, Colo.: 409 ants (167385, exchange).

GREGG, Dr. WENDELL O., Los Angeles, Calif.: 9 mollusks from California and Baja California (168827).

GRETHER, Lt. (jg) D. F., F. P. O., San Francisco, Calif.: 94 butterflies and a few other insects from the Marshall and Marianas Islands (169519).

GREY, Rev. JOHN H., Jr., Charlottesville, Va.: 1 sharp-tailed sparrow (168286).

GRIFFITH, L. O., Nashville, Ind.: 35 prints, including 11 color prints by L. O. Griffith, for special exhibition from May 7 through June 3, 1945 (170115, loan).

GRUNER, JOHN W., Minneapolis, Minn.: 1 specimen of groutite from Cuyana Range, Minn. (169057).

GUGGENHEIM, Capt. PAUL, Los Angeles, Calif.: Stone and bone artifacts and skeletal material from sites on Amchitka Island, Aleutians (168967).

GUIBERSON DIESEL ENGINE Co., Dallas, Tex.: A radial Diesel engine for Army M3 light tank, series 5, T–1020 model, ca. 1943 (168256).

GUNTHER, LLOYD F., and RICHARD CROSS, A. P. O., San Francisco, Calif.: 177 insects, mostly beetles (168969)

GURNEY, Maj. A. B., A. P. O., San Francisco, Calif., Collection of miscellaneous insects collected on Bougainville Island by donor (168611); 500 miscellaneous insects including 11 vials of flies, 6 vials of termites, and 2 vials of termite guests, also 7 mollusks, all from Bougainville except 1 vial collected on Guadalcanal in 1933 (169059).

GUTIÉRREZ A., RAMÓN, Santiago, Chile: 201 beetles (170043, exchange).

HADLEY, Corp. J. E., A. P. O., San Francisco, Calif.: 2 hermit crabs, 10+ crabs, 17 mollusks, 1 coral (169556); 23 marine invertebrates, 1 beetle, mollusks, and echinoderms from New Guinea (169912).

HAEGER, S/Sgt. JAMES S., A. P. O., San Francisco, Calif.: A small collection of miscellaneous insects from New Guinea (169677).

HAHN, Mrs. E. MAY. (See under American War Mothers.)

HAINES, A. L., Vermillion, S. Dak.: Approximately 640 invertebrate fossils from the Devonian of Iowa and 10 fossil snails from the Cretaceous of South Dakota (168368).

HALL, Capt. DAVID G., A. P. O., San Francisco, Calif.: A small collection of miscellaneous insects from New Guinea and adjacent islands (169109). (See also under Dr. C. H. T. Townsend.)

HAMEL, C. C., Amherst, Ohio: 18 septaria of marcasite from the Devonian of Ohio (168231).

HANSON, Capt. JOHN J., Indiantown Gap Military Reservation, Pa.: 3 model gasoline aircraft engines—"Brown" Model E, "Brown" Model D, and "Hurleman Aristocrat" (168734, loan); 2 model gasoline aircraft engines, "OK Super 60" and "Brat" (170170, loan).

HARDY, Maj. D. ELMO, A. P. O., New York, N. Y.: 326 pinned specimens of miscellaneous insects (168540); a collection of miscellaneous insects, collected at various points in India (168612).

HARPER, DOROTHY CAROLYN, Stillwater, Okla.: 1 plant from Oklahoma (169419).

HARPER, Dr. FRANCIS, Swarthmore, Pa.: A signal horn and an alligator

gig, or pick, collected from natives of the Okefinokee Swamp area (168397).

HARPER, Dr. ROLAND M., University, Ala.: 45 plants from Alabama (167806).

HARRINGTON, A. M., Philadelphia, Pa.: An umbrella frame constructed with ribs of whalebone and used between 1835 and 1865 at Barre, Mass., by G. Hobbs, grandfather of the donor (169283).

HARRINGTON, Prof. H. D. (See under Colorado State College.)

HARRINGTON, Lt. (jg) WILLIAM C., Palo Alto, Calif.: 81 mollusks and 2 starfishes from the South Pacific (169359).

HARRIS, B. K., F. P. O., San Francisco, Calif.: 31 butterflies (169352).

HARRISON, Prof. BERTRAM F. (See under Brigham Young University.)

HARRY, HAROLD WILLIAM, F. P. O., San Francisco, Calif.: 5 mollusks from Saipan (170428).

HARVARD UNIVERSITY:

Arnold Arboretum: Jamaica Plain, Mass.: 294 plants from Cuba (167931); (through Prof. J. H. Faull) 4 ferns from Jamaica (168587, exchange); 3 grasses from the Fiji Islands (168790); 2 grasses from the West Indies (169387); 282 plants (170364); 10 grasses from Panama (170507).

Gray Herbarium, Cambridge, Mass.: 70 plants from British Columbia (168309); 18 plants from Colombia (168401); 71 plants from Grand Manan, New Brunswick (168783); 31 grasses from Panama (169332); 8 photographs of plants (169679); (through C. A. Weatherby) 2 photographs of plants (168943, exchange).

Museum of Comparative Zoology, Cambridge, Mass.: (Through William C. Schroeder) paratype of a fish from Cuba (167863, exchange); 10 cotypes, 5 specimens each, of 2 species of fishes (168158, exchange); (through Prof. Nathan Banks) 7 flies (168282); 10 cotypes of catfishes and 3 paratypes of sharks (168905, exchange); 5 beetles (169291); 1 mollusk (169468, exchange); 134 reptiles including cotypes or paratypes of 22 species, also 8 turtles from Acapulco, Mexico (169815, gift, exchange); 7 beetles (170177, exchange).

HASBROUCK, Dr. E. M., Washington, D. C.: 1 surf scoter (169486).

HASLER, Prof. ARTHUR D. (See under Frits Johansen and Prof. Chancey Juday.)

HATCH, Prof. MELVILLE H., Seattle, Wash.: 3 beetles (169342).

HAUGHT, OSCAR L., Bogota, Colombia: 1 fern from Colombia (168955); 1,319 plants from Colombia (169222).

HAVILAND, JOHN G., Washington, D. C.: Walrus tusk engraved by Onno, a native of Chukchee Peninsula, Siberia (169759).

HAYES, Prof. ALBERT O., New Brunswick, N. J.: 2 brachiopods from the Silurian of New Brunswick, Canada.

HEAD, HENRY R., Ithaca, N. Y.: 1 fluted folsomoid blade of green jasper said to have been found on a bench above Willseyville Creek, 1 mile west of Willseyville, Tioga County, N. Y., about 1881 (160827).

HENDERSON, CHARLES B. (See under Department of Commerce, Metals Reserve Co.)

HENRY, N. E., Jersey Shore, Pa.: 1 wheel bug (168349).

HERALD, Lt. EARL S. (See under War Department, Army Air Forces Tactical Center.)

HERMANN, Dr. FREDERICK J., Greenbelt, Md.: A small collection of insects from Colombia, Peru, and Brazil, taken in 1944 (168240); 36 grasses from Colombia and Peru (168937); 6 plants from Maryland and Virginia (169046); 132 plants from Colombia (168935, 168939, 169614); 1 cultivated plant from Puerto Rico (169793).

HERTLEIN, Dr. L. G. (See under California Academy of Sciences.)

HESS, FRANK L., College Park, Md.: 2 specimens of uranium minerals from Ruggles mine, Grafton Center, N. H., and 1 granite from the dike at Hogden Hill, southwest of Buckfield, Maine (168610); 1 specimen of goldfieldite from Mohawk Lease, Goldfield, Nev. (168627).

HESS, J. W., Washington, D. C.: 30 plants from Australia (169896).

HESTER, J. PINCKNEY, Fredonia, Ariz.: 7 plants from southwestern United States (168711); fruit of cactus (168750).

HEWES, Dr. L. I., San Francisco, Calif.: (Through Austin H. Clark) 14 Lepidoptera (170219).

HIBBARD, RAYMOND R., Buffalo, N. Y.: 3 samples of washings with Ostracoda and Bryozoa from the Middle Devonian rocks of western New York (168195, exchange).

HIGHAM, H. W., Springfield, Va.: Gold medal and silver belt presented to H. W. Higham in 1883 and 1880, respectively, in recognition of his achievements as long-distance champion bicycle rider of the world and a photograph of him in bicycle costume (168449).

HIGLEY, Dean L. ALLEN, Delaware City, Del.: 13 iron concretions with

regularly arranged surface markings, from the northern area of the Black Hills, near Buffalo, S. Dak. (168219).

HILDEBRAND, Dr. S. F. (See under Department of the Interior, Fish and Wildlife Service.)

HINCKLEY, L. C., Marfa, Tex.: 23 plants from Texas (167844); 30 grasses from Texas (168998).

HITCHCOCK, Prof. C. LEO. (See under University of Washington.)

HOBBS, Dr. HORTON H., Gainesville, Fla.: 4 isopods from Florida (155587); 1 blind amphipod (167707); 12 crayfishes including types of 2 new species and paratypes of one of them (169597)

HOFFMAN, RICHARD L., Charlottesville, Va.: 9 salamanders from near Charlottesville (170048).

HOLDRIDGE, L. R., Port-au-Prince, Haiti: 205 plants from Haiti (168027, 170204).

HOLLAND, Maj. THOMAS C. (See under Mrs. Clarissa Humphreys.)

HOLZBERG, Mrs. T. J., Washington, D. C.: 3 miniature cameras and 3 plate holders (168506).

HONESS, Capt. RALPH F., A. P. O., San Francisco, Calif.: 72 fresh-water snails from Zambales Province, Luzon, Philippine Islands (170070).

HOOVER, Hon. HERBERT, Palo Alto, Calif.: (Through Mrs. Gertrude L. Bowman.) Dress and pair of shoes owned by Mrs. Herbert Hoover (167821); silver metal thread dress and pair of black and silver evening slippers worn by Mrs. Herbert Hoover during the administration of her husband as President of the United States (169444).

HORNBY, LESTER G., Rockport, Mass.: 52 prints (46 etchings and 6 lithographs) by Lester G. Hornby, for special exhibition from March 12 through April 8, 1945, under the title "Etchings and Lithographs of Paris and Rural France" (169799, loan).

HORNEY, ODUS C. (See under Mrs Andrew Summers Rowan.)

HOTCHKISS, NEIL. (See under Department of the Interior, Fish and Wildlife Service.)

HOWE, Mrs. EMERSON, Washington, D. C.: French and Spanish swords and a Peruvian diplomatic uniform (24 specimens) (169237); 10 prehistoric Peruvian vessels (169339).

HRDLIČKA, Dr. ALEŠ (deceased): 2 feathered ponchos from Peru collected by the donor and presented to the Museum in 1912 (169866).

HUBBARD, Prof. C. ANDRESEN, Forest Grove, Oreg.: 12 fleas representing 8 species, all types and allotypes (168420).

HUBBS, Dr. CARL L., La Jolla, Calif.: 2 copepods (167879). (See also under Prof. Loye Miller.)

HUCKEL, EARLE W., Sudbury, Mass.: 12 examples of graphic art as follows: 7 lithographs, 1 Woodburytype, 1 highlight halftone, 1 offset lithograph, 1 line-engraving, and 1 invitation card used by Thomas Sully (169232).

HUFFMAN, EARL C., Pasadena, Calif.: 144 marine mollusks from the Gulf of California (168432).

HUGHES, Prof. R. CHESTER. (See under Helen Edith Davis.)

HULL, DENNISON B., Chicago, Ill.: 1 Ontarion hearing set in lucite case (169867).

HUMES, Dr. ARTHUR G., A. P. O., San Francisco, Calif.: 1 bat collected on Mios Woendi, Padaido Islands, near Biak, Dutch New Guinea (168999).

HUMPHREY, FRED L., Reno, Nev.: About 60 Middle and Lower Cambrian trilobites from the Groom district, Nevada (169646).

HUMPHREYS, Mrs. CLARISSA, Crosbyton, Tex.: (Through Maj. Thomas C. Holland) Silicified interior of a septarium from Montague County, Tex. (168163).

HUNGERFORD, Prof. H. B., (See under University of Kansas.)

HUNT, T. STERRY. (See under James Stuart Douglas.)

HUNTER, Maj. GEORGE W., III, Washington, D. C.: 40 mollusks from Palo, Leyte, Philippine Islands (169725); 12 mollusks from Saipan (169990).

HUNZIKER, ARMANDO T., Buenos Aires, Argentina: 3 plants from Argentina (168941).

HUTCHINS, JAMES, Windon, N. C.: 1 nest of the red-eyed vireo (167897).

HUTZEL, Lt. (jg) J. N., F. P. O., San Francisco, Calif.: (Through Dr. Alan Stone) A small collection of insects and Crustacea, containing several species of unusual interest, collected on Iwo Jima (170194).

HYMAN, Dr. LIBBIE H., New York, N. Y.: 1 flatworm slide representing a new species recently described by Dr. Hyman (167933).

ILLINOIS STATE NATURAL HISTORY SURVEY DIVISION, Urbana, Ill.: (Through Dr. H. H. Ross) 2 beetles (169255).

ILLINOIS, UNIVERSITY OF, Urbana, Ill.: (Through Prof. John T. Buchholz) 7 photographs of plants (167930, exchange).

ILTIS, T/5 HUGH H., A. P. O., New York, N. Y.: 1 plant from Oklahoma (169152); 63 plants from France (170505).

ILTIS, Prof. HUGO, Fredericksburg, Va.: 6 parasitic copepods (161576).

ILTIS, Pfc. WILFRED G., A. P. O., San Francisco, Calif.: 5 mollusks, 5 corals, 8 echinoderms, 3 snakes, 1 lizard, 7 frogs, and a few crustaceans (168794): a collection of insects, crustaceans, and mollusks (168945).

INGLIS, FRED B. (See under St. Clair Brooks.)

INSTITUTE OF TROPICAL AGRICULTURE, Mayagüez, Puerto Rico: 9 plants from Puerto Rico (170441).

INSTITUTO AGRONÓMICO DO NORTE, Belma, Pará, Brazil: (Through Dr. Felisberto Camargo) 14 plants from Brazil (168619).

INSTITUTO DE CIENCIAS NATURALES, Bogotá, Colombia: (Through Dr. Hernando García y Barriga) 155 plants from Colombia (167946); (through Francisco J. Otoya) 51 beetles from Colombia (168172); 342 plants from Colombia (168330, 168623 168648, exchange).

INSTITUTO DE EXPERIMENTAL AGRICOLA, Rio de Janeiro, Brazil: (Through Dr. Petr Wygodzinsky) 7 Hemiptera, representing 5 genera and 5 species (169412, exchange).

INSTITUTO EXPERIMENTAL DE INVESTIGACIÓN Y FOMENTO AGRICOLA-GANADERO, Santa Fe, Argentina: (Through Arturo E. Rangonese) 84 plants from Argentina (156573).

INSTITUTO GAMMON, Lavras, Minas Gerais, Brazil: 300 grasses from Brazil (170272, exchange).

INTERIOR, U. S. DEPARTMENT OF THE:

Bureau of Mines, Pittsburgh, Pa.: 8 photographs of mining scenes illustrating sources of mineral drugs (168423).

Fish and Wildlife Service, Chicago, Ill.: (Through Neil Hotchkiss) 12 plants from Alaska (167932), 12 grasses from Hudson Bay region, Canada (168969); 9 plants from Canada (169002), 156 plants from Mexico and Guatemala (169969); (through Isaac Ginsburg) 3 fishes from Dominican Republic collected in 1933 by John C. Armstrong (168056); (through A. L. Nelson) 22 specimens of gastropods from Massachusetts (169103); 1 skeleton of a longhorn steer (169463); 1 South American gull (169487); (through Dr. D. G. Frey) 76 marine mollusks from Chesapeake Bay, Md. (169847); (through Lyle Anderson) 57 marine invertebrates, 10 mollusks, 2 echinoderms, and 15 fishes (169897); 11 feathered headdresses and other ornaments from the Jivaro Indians of Ecuador (169953); (through Dr. John W. Aldrich) 13 partial skeletons of wild and domestic turkeys, 1 partial skeleton of a trumpeter swan (170302); skeleton of porpoise picked up by otter trawler *Mars* (170373); 1 Italian green woodpecker (170466); (through Dr. S. F. Hildebrand) 4 fishes (representing 4 species) from Punta San Diego, Fajardo, Puerto Rico, collected by Donald S. Erdman on March 8, 1945, and in May 1945 (170488).

Geological Survey, Washington, D. C.: 4 Pennsylvanian brachiopods from New Mexico (167811); about 3,500 Paleozoic and Mesozoic fossils received from the Chief of Engineers, U. S. Army, from the Canol Project, Canada (168127); 20 brachiopods from the Eocene and Cretaceous rocks in well core samples from Florida (168242); 100 Devonian fossils from northeastern Arizona collected by Dr. J. W. Huddle (168288); 6 specimens of high-iron high-alumina clay from Haneyville, Clinton County, Pa. (168327); approximately 1,000 Ordovician trilobites from the Levis boulders of Quebec (168736); 1 specimen of siderophyllite from Brooks Mountain, Seward Peninsula, Alaska (168893); 1 specimen of calomel (mercury ore) from Mariposa mine, Brewster County, Tex. (169373); 3 collections of vertebrate fossils, viz, 30 specimens from Flatiron, Elk Creek, near Newcastle, Colo., 50 Silurian and Devonian specimens from Arkansas and 25 Ordovician specimens from Wisconsin (169580); about 10,000 specimens of Paleozoic fossils from the Appalachian region and from other eastern States, collected by Dr. Charles Butts and resulting largely from cooperative work with State organizations (169690); a specimen of lead-zinc ore from Kimberly mine, Kokomo district, Summit County, Colo. (169754); 34 specimens of manganiferous and ferruginous chert from Perry and Lewis Counties, Tenn. (170034); approximately 200 specimens of fossils, ranging in age from Ordovician to Devonian, from Virginia and West Virginia (170362); approximately 500 invertebrate fossils, ranging in age from Cambrian to Silurian, from the Rose Hill area, southwestern Virginia (170363); 1 specimen of fluorite from San Juan area, Ouray County, Colo., presented by Mrs. Mary E. McClellan (170455).

National Park Service, Chicago, Ill.: (Through Erik K. Reed) Turkey bones from archeological sites at Mancos Canyon, Colo. (163335);

(through Thomas Boles) 2 cave insects collected in Carlsbad Caverns (167872); 46 plants from Grand Canyon National Park, Ariz. (168185).

INTERNATIONAL BUSINESS MACHINES CORPORATION, New York, N. Y.: (Through T. J. Watson) 2 original completely power-operated typewriters, the first of their kind produced for commercial service—(1) "Electromatic" all electric typewriter, Serial No. P–144 and (2) "International Proportional Spacing Machine," Serial No. 27559 (169125).

IOWA STATE COLLEGE, Ames, Iowa: 61 grasses from Iowa (167990); (through Dr. L. D. Tuthill) 6 specimens of insects, 2 paratypes of each (166824, exchange).

JACKSON, PROF. W. H., Blacksburg, Va.: 7 lots of mollusks, 1 lot of annelid worms, and 5 lots of crustaceans (169862).

JACOBSON, MORRIS K., Rockaway, N. Y.: 156 mollusks from Brank Lake, Warren County, N. Y. (169473); 16 mollusks (169585).

JAMES, ANITA. (See under Eleanor R. Binger.)

JELLISON, Maj. W. L., Hamilton, Mont.: 15 snakes, 1 frog, and 2 bats from near Dibrugarb, Likhampur, India (168043); 1,472 insects, including beetles, from Montana and Idaho (168392, 168475); 3 insects, paratypes of 2 species (170371). (See also under Federal Security Agency, Public Health Service, Hamilton, Mont.)

JENNINGS, C. C. (See under Rhode Island Department of Agriculture and Conservation.)

JOHANSEN, FRITS, Ottawa, Ontario: (Through Dr. Arthur Hasler) Approximately 5,000 identified fresh-water Crustacea and about 100 unidentified fresh-water Crustacea (168550).

JOHNS HOPKINS UNIVERSITY, Baltimore, Md.: (Through Dr. E. W. Berry) 1 lot of bird bones from Venezuela (168026).

JOHNSON, ALVIN, New York, N. Y.: A twinned calcite rhomb from New Mexico (168162).

JOHNSON, ARTHUR F., Minneapolis, Minn.: 4 specimens of old motion-picture film, cut from 50-foot reels and with bound edges entitled: "Annabel," "Train," "Circus Parade," and "Comedy" (168954).

JOHNSON, Prof. HELGI, New Brunswick, N. J.: 350 Ordovician fossils from the St. George and Table Head formations of Newfoundland (169811).

JOHNSON, Lt. MURRAY L., Baltimore, Md.: A collection of reptiles, amphibians, fishes, crustaceans, and insects from Sierra Leone, Ireland, Trinidad, St. Thomas, and Brazil (168299).

JOHNSON, PAUL E., Washington, D. C.: Gold finger ring worn by Lt. W. V. Riley, U. S. Army, when killed at the battle of the Little Big Horn, June 25, 1876 (168777).

JOHNSON, Lt. RAYMOND E., Lincoln, Nebr.: 1,048 fishes collected by donor and wife at St. Simons Island and vicinity, Ga., together with crustaceans, tadpoles, and a mollusk (160-888).

JOHNSTON, Mrs. DOROTHY ELLIOTT MITCHELL, Washington, D. C.: 16 bird skins from Central America (170112).

JOHNSTON, Dr. W. D., Jr., Pelican Lake, Wis.: 1 aquamarine from Brazil, weight 124.94 carats (170403, deposit).

JONES, CHARLES F., Blanchester, Ohio; W. N. COLLINS, Paris, Tex.; and ROBERT CARDER, Lost Creek, W. Va.: 1 deer (169086).

JOYNER, Mr. and Mrs. CALVIN, Washington, D. C.: 16 jade Chinese rings, collected in Chungking, China, during present war (168537).

JUDAY, Prof. CHANCEY, Madison, Wis.: (Through Dr. Arthur D. Hasler) 6 lots of plankton from South Dakota and Manitoba collected in 1939 (168549).

JUDD, NEIL M., Washington, D. C.: 1 mole collected at Silver Spring, Md. (170158).

JUSSEN, VIRGINIA, Washington, D. C.: Dental plate of extinct fish (Miocene, Calvert) collected half a mile south of Chesapeake Beach, Calvert County, Md., 1942 (169516).

JUSTICE, U. S. DEPARTMENT OF, *Federal Bureau of Investigation*, Washington, D. C.: Incomplete skeleton of adult male Negro from South Carolina (169682).

KAINEN, JACOB, Washington, D. C.: Wood-engraving printed from 4 color-blocks depicting a Jewish altar of incense (169233).

KALTENBERGER, L. H., and L. C. VERDUIN, Washington, D. C.: Skull of beaked whale (168396).

KANSAS, UNIVERSITY OF, Lawrence, Kans.: (Through Prof. H. B. Hungerford) 1 bug (168887, exchange).

KARTMAN, Sgt. LEO, A. P. O., Miami, Fla.: 150 mosquitoes from Iran and Senegal (168165).

KAY, MAIRE WEIR, Columbus, Ohio: 2 types of trematodes (168522, 168878).

KEARNEY, Dr. T. H., San Francisco, Calif.: 2 plants from Arizona (168353).

KEENAN, JAMES E., Wichita, Kans.: 808 specimens (30 species) of Maquoketa Ostracoda from Castlewood Station, Mo. (168419).

KELLOGG, Dr. REMINGTON, Washington, D. C.: 1 pine mouse (168303).

KEMP, Corp. JAMES C. (See under Sgt. Henry E. Allanson, Jr.)

KENK, Prof. ROMAN, Ann Arbor, Mich.: Approximately 10 amphipods from Michigan (168846).

KENTUCKY, UNIVERSITY OF, Lexington, Ky.: 80 plants from Kentucky (169479, exchange).

KERNODLE, GEORGE H., Washington, D. C.: An Eli Terry shelf clock, ca. 1818 (168725, loan); early 19th-century surveyor's compass marked "S. Kern, inventor" and "J. A. Danner, Maker, Middleton, Va." (170227, loan).

KERR, Prof. PAUL F., New York, N. Y.: A specimen each of tungstite and hydrotungstite from Calacalani, Bolivia (168094).

KIBBE, EUGENE, Elsah, Ill.: 10 pictorial photographs sent for exhibition during the month of November 1944 (168909, loan); 4 pictorial photographs (169572).

KIENER, Dr. WALTER, Lincoln, Nebr.: 68 grasses from Colorado (169748).

KILLIP, ELLSWORTH P., Washington, D. C.: Specimen of bark cloth made from inner bark of the fig tree and collected in Peru by Guillermo Klug in 1931 (168765); 44 plants collected in Venezuela by F. Cardona, purchased from Dr. H. Pittier by Mr. Killip (169144); 60 plants from Maryland and Virginia (169616). (See also under Smithsonian Institution, National Museum.)

KILPATRICK, NORMAN L., Arlington, Va.: A late 18th-century "patriotic" hempen quilt, combining pieced and appliqued work in 9-patch blocks and a large center square showing an eagle and stars motif, which came from the Brown-Francis family homestead at Canterbury, Conn. (168993).

KIM, YONGJEUNG, Washington, D. C.: Korean national flag (*gook-gi*) (169781).

KINCAID, Prof. TREVOR. (See under University of Washington.)

KING, ROBERT C., Washington, D. C.: Child's 4-wheeled vehicle (hand-car) ca. 1900, used by the donor as a child (170052).

KING, Dr. ROBERT E., Denver, Colo.: 19 Permian brachiopods from the San Andres limestone of New Mexico (168474).

KING, Dr. W. V., Fort MacPherson, Ga.: 72 adults and pupae of mosquitoes from New Guinea and Australia (169104).

KINZER, CHARLES WILLIAM, Greenbelt, Md.: A model of Simplex car couplers (pair) and a model of a Dunn car coupler (169717, loan).

KIPLINGER WASHINGTON AGENCY, Washington, D. C.: (Through W. M. Kiplinger) Group of bronze statuettes (48 specimens) of notable public men, entitled "The Living Hall of Washington, 1944" (167812).

KIRK, Dr. EDWIN, Washington, D. C.: 12 etchings by various artists (169298)

KLEPPER, Mrs. LEON, Lock Haven, Pa.: A walking staff of Dr. A. T. Still, founder of osteopathy, owned by the late Dr. Harry M. Vastine, Harrisburg, Pa., uncle of the donor (169907). (See also under Estate of Dr. Harry M. Vastine.)

KLOSS, Mrs. GENE, Oakland, Calif.: 34 etchings by Gene Kloss, for special exhibition from February 12 through March 11, 1945 (169541, loan); 1 aquatint with drypoint combination, "Church of the Storm Country," by Gene Kloss (170056).

KNIGHT, Dr. J. BROOKES, Washington, D. C.: 5 specimens of a Pennsylvanian gastropod from the vicinity of St. Louis including 1 figured specimen (169900).

KNIGHT, Lt. KENNETH L., A. P. O., San Francisco, Calif.: A small collection of miscellaneous insects from Guadalcanal, including holotype, allotype, and 10 paratypes of 1 species of mosquito (169433); 17 specimens of mosquito material; 6 pinned adults including 2 holotypes, 1 allotype, 3 paratypes, 10 slides larval and pupal skins, 1 slide of genitalia (170504).

KOCH, WALTER H., Salt Lake City, Utah: 1 specimen of kermesite on stibnite from Triumph mine near Hailey, Idaho (169549, exchange).

KOHLS, Maj. GLEN M. (See under Federal Security Agency, Public Health Service, Hamilton, Mont., and under United States of America Typhus Commission.)

KOMP, Lt. Col. W. H. W., Ancon, Canal Zone: (Through Dr. J. P. E. Morrison) 35 land and fresh-water snails from Venezuela (168823); 4 ants from Canal Zone and 1 antlike spider from Colombia, collected by donor (170374).

KORFF, SERGE A., New York, N. Y.: 6 postage stamps of Peru and the United States (169812).

KOSCO, Comdr. GEORGE F., Tooele, Utah: 9 earthenware figurine heads from a site on the Orinoco River at Ciudad Bolivar, Venezuela (168542).

KOVARIK, ANTHONY, Circle, Mont.: (Through Joseph J. Cerny) A Bohe-

mian silver coin struck about A. D. 1300 (169609).

KRAUSS, N. L., Honolulu, Hawaii: 59 isopods, 5 amphipods, 2 earthworms, and 1 scorpion (167781).

KRIMKE, JEROME P., South Orange, N. J.: 40 pictorial photographs for special exhibition during October 1944 (168672, loan).

KUMM, Dr. HENRY W., New York, N. Y.: 95 mosquitoes, representing 11 species and including type and allotype of 2 species (167923).

KUNTZ, Lt. (jg) ROBERT E., F. P. O., San Francisco, Calif.: 84 fishes and 1 crustacean (168310)

KUSCHEL, P. GUILLERMO, Santiago, Chile: 122 beetles (170046).

KUSTER, Prof. K. C., Bloomsburg, Pa.: 5 weevils collected in Pennsylvania (167688).

LAMBROS, AGELCA, Washington, D. C.: 1 fish collected in 1937 on White Cloud Mountain near Canton, China (168840).

LAMM, DONALD W., A. P. O., Miami, Fla.: 62 bird skins from Brazil (168729, 169338, 170224).

LANDO, Ensign ROBERT ELLIS, F. P. O., San Francisco, Calif.: 83 marine shells, 4 starfishes, crabs, and insects (168218); 75 shells and some insects from southwest Pacific (169180); about 200 mollusks from the east New Guinea area, 1 coral, and a starfish (169318).

LARERY, ALICE M., Washington, D. C.: 1 plant from District of Columbia (168669).

LARRABEE, D. M. (See under A. Renato Semola.)

LARRABEE, HARVEY H., Jackson, Mich.: Model of a Seagrave fire engine, ca. 1942 (167307).

LEGRAND, Dr. DIEGO. (See under Museo de Historia Natural.)

LÉON, Rev. Brother, Habana, Cuba: 96 orchids from Cuba (167947, exchange); 134 plants from Cuba (168583, 168717, 168979); 20 grasses from Cuba (169475).

LEONARD, E. C., Washington, D. C.: 125 plants, mostly from Maryland (169182).

LEVI-CASTILLO, Dr. ROBERTO, Guayaquil, Ecuador: 5 specimens of mosquito material, comprising male and female types, 2 larval and 1 pupal skin of a new species (169996); 2 vials of mosquito eggs from Ecuador (170296).

LEWIS, Mrs. W. LEE, Evanston, Ill.: A mahogany case containing specimens of lewisite (American mustard gas, or "blister gas") and derivatives, prepared by Maj. H. W. Stiegler for use by Col. W. Lee Lewis, who first isolated and developed lewisite (170140).

LEWTON, Mrs. BLANCHE C., Takoma Park, Md.: 31 study samples of representative rayon fabrics, made for the spring and summer of 1943, identified as to name, weave, material, use, and source (168224).

LEWTON, Dr. F. L. (See under J. D. Beggs.)

LEYVA, CARLOS J., Pluma Hidalgo, Mexico: 6 specimens and 1 box of seeds of plants from Mexico (168338, 170226); 5 photographs of a plant (169797).

LINDSEY, Prof. ALTON A., Albuquerque, N. Mex.: 1 wood rat and 2 white-footed mice from New Mexico (169936); 4 ferns from New Mexico (169937).

LISLE CORPORATION, Clarinda, Iowa: 14 magnetic crankcase drain plugs (170506).

LLOYD, ROBERT H. (See under American Numismatic Association.)

LOCKLIN, CHARLES R., Detroit, Mich.: 39 fresh-water shells from Union Lake, near Pontiac, Mich. (168472); 8 fossil oystershells (170522).

LOUISIANA STATE UNIVERSITY, Baton Rouge, La.: Alga from Louisiana (168713).

LOUTTIT, W. EASTON, Jr., Providence, R. I.: A monocycle (incomplete) of period of 1869 (161728).

LOVELAND, JOHN WINTHROP (deceased), Washington, D. C.: Built-up scale model of the yacht *Ariel* (168987, bequest).

LUCAS, PAUL, Sanford, N. C.: 12 models comprising a set of miniature flour mill machinery, also 11 pairs of elevator boots and head and 500 elevator cups all made to the same scale as the models (168971, loan).

LYNCH, Prof. JAMES E., Seattle, Wash.: Approximately 330 amphipods (167-957).

LYONNET, Prof. PIERRE, Saltillo, Mexico: 576 plants from Mexico (167846).

MACCREARY, Lt. Comdr. DONALD. (See under Navy Department, National Naval Medical School.)

MAHAN, JOHN G. (See under University of Virginia, Miller School of Biology.)

MAHIEUX, PIERRE, Santa Rosalia, Baja California: (Through Ivan F. Wilson) 8 specimens of minerals and copper ores from Santa Rosalia (166526).

MAINE, UNIVERSITY OF, Orono, Maine: 63 plants from Maine (169763, exchange).

MALKIN, Pfc. BORYS, A. P. O., San Francisco, Calif.: A collection of miscellaneous insects, centipedes, frogs, lizards, from Dutch New Guinea and Australia (169703); a collection of

miscellaneous insects from Australia by the donor (170082); a collection of miscellaneous insects from Dutch New Guinea (170460).

MALKIN, SOLOMON, Washington, D. C.: An Edison Amberola (phonograph), Serial No. 20, and 1 cylindrical blue wax record No. 3130, "Who" (168263).

MALLERY, Capt. A. H., Columbus, Ohio: Ethnological specimens from the Melanesian village of Kala on Hood Bay, New Guinea (169816).

MANIFOLD, C. B., Washington, D. C.: (Through Department of Agriculture, Bureau of Entomology and Plant Quarantine) 1 beetle from the Bayano region in Panama (168539).

MANN, Dr. WILLIAM M., Washington, D. C.: 2 ceremonial staffs and 1 wooden club from Rennel Island, Solomon Archipelago, collected by the donor (168616).

MARIE, Rev. Father LOUIS, Quebec, Quebec: 75 grasses from Canada (169496).

MARSHALL, ERNEST, Laurel Md.: 2 woodchucks, 1 gray fox, 1 skunk, 1 mink, and 17 muskrats (168773).

MARSHALL, Prof. NELSON, Storrs, Conn.: 14 amphipods (169286).

MARSHALL, WILLIAM B., Washington, D. C.: Specimen of 4-lobed sassafras leaves (167877); 32 plants from New Jersey (168077, 168125); 4 plants from Washington, D. C. (168668).

MARTIN, GLENN J., Washington, D. C.: 1 photomechanical reproduction of a painting by George Hitchcock, produced by the Detroit Photographic Co in 1902 by a special process (168631).

MARTÍNEZ, Prof. MAXIMO, Mexico, D. F.: 108 plants from Mexico (170114, 170420).

MARTÍNEZ A., JUAN, Montevideo, Uruguay: 16 fishes from Uruguay (168960).

MARVIN, KATHERINE M., Lancaster, Mass.: A collection of matting, basketry, fish nets, and personal ornaments and a small collection of shells made by the donor's sister, Mary Marvin, in Micronesia (167619).

MAXON, Dr. WILLIAM R., Washington, D. C.: 13 plants from Washington, D. C. (168305, 168618).

MAYER, JAMES, Baltimore, Md.: (Through John Coyle) Steam-operated working model of mine hoisting engine and working model of coal-fired vertical steam boiler (170012).

MAYFIELD, Rev. WALKER, Bethesda, Md.: 2 specimens of ante-bellum homespun and a linen sheet and a cotton and wool blanket handwoven by Mrs. Susan (Moody) Hewett, Green Hill, Warren County, Ky., mother of Mrs. Walker Mayfield (170380).

MCALESTER, R. F., Columbus, Ohio: 1 specimen of marcasite from south of Stratford, Delaware County, Ohio (168901).

MCCANN, T. F., Denver, Colo.: 353 mollusks from the canyon of the Yampa River, Colo. (168759).

MCCLAY, ARTHUR, Sacramento, Calif.: 5 beetles (169292).

MCCLURE, Dr. F. A., Washington, D. C.: 4 plants from Washington, D. C. (167989); approximately 60 miscellaneous insects collected from bamboo (168394). (See also under Standard Brush & Broom Co. and U. S. Department of Agriculture.)

MCCRARY, O. F., Raleigh, N. C.: 1 cultivated plant from North Carolina (168604).

MCDONALD, Pfc. EDWARD D., Cleveland, Ohio: 5 plants from the Aleutian Islands (167890); 35 plants from Italy (169805).

MCGINTY, THOMAS L., Boynton, Fla.: 70 marine shells from Florida (168065); 8 mollusks and 1 crustacean (168608, 170184).

MCGUFFIN, FRANK L., Washington, D. C.: 8 specimens illustrating printing and processing of photographs on Ansco color paper (168203, loan); 6 Ansco Printon enlargements from 4 by 5 Kodachromes (169910).

MCGUSTY, Dr. V. W. T., Suva, Fiji: Model of a sea-going outrigger canoe, *baurau*, complete with mast, mat sail, and gear, made about 1940 by a Gilbertese man of Tarawa Island (168569).

MCMILLEN, Pfc. JACK R., A. P. O., New York, N. Y.: 38 insects (169611); 126 plants from Burma (169917, 170264).

MCVAUGH, Dr. ROGERS. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

MEAD, Hon. JAMES M. (See under Mrs. Helen Slater Ramsay.)

MEARNS, Estate of EDGAR A.: 1 Pocket Poco camera, 1 metal plate holder, 1 leather carrying case (167990).

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA, Washington, D. C.: (Through Theodore Wiprud) Portrait of Robert Morris, 1734–1806 (169467).

MENZEL, R. WINSTON, Yorktown, Va.: 2 fishes taken in the Chickahominy River (168603); 6 catfishes from the James River, Va. (168982).

MERRIMAN, Dr. DANIEL. (See under Yale University, Bingham Oceanographic Laboratory.)

MESSIC, BEN, Los Angeles, Calif.: 2 lithographs, "The Pitchman" and "Two Laborers," by the donor (168058).

METROPOLITAN CAMERA CLUB COUNCIL, Forest Hills, N. Y.: 87 salon

prints from special exhibition from January 9 to 31, 1945, inclusive (169321, loan).

MEYER, Maj. Gen. GEORGE R., A. P. O., New Orleans, La.: Nest of a swift from Panama (169569).

MEYER, Capt. M. C., F. P. O., San Francisco, Calif.: 90 marine invertebrates, 37 echinoderms, 89 mollusks, 1 coral, 13 parasitic worms, 14 insects, 1 calcareous alga, 1 reptile, and 30 fishes (169081).

MICHAEL, ARTHUR. (See under Smithsonian Institution.)

MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich.: 1 plant from Kiska Island, Alaska (167896); 430 mosses from Puerto Rico (169297); 564 plants from Hongkong (169571); 245 plants from Arizona (170040, exchange).

Botanical Garden: 95 ferns collected in Mexico by Jose V. Santos (169889); 272 grasses collected by Jose V. Santos in Mexico (169942).

Museum of Zoology: 21 fishes from Mexico and Minnesota (169998, exchange).

MICKEL, Dr. CLARENCE E. (See under University of Minnesota.)

MILES, CECIL, Mariquita, Colombia: 4 fishes from Colombia (168484, 169122).

MILLER, Prof. ALDEN H. (See under University of California, Museum of Vertebrate Zoology.)

MILLER, Lt. EDWIN V., A. P. O., San Francisco, Calif.: 1 beetle (169784).

MILLER, GERRIT S., Jr., Washington, D. C.: 2 box turtles, 1 bird, 8 mammals, 10 reptiles, 12 amphibians, and 214 plants from the vicinity of Gatlinburg, Tenn. (168805, 168952); 1 flying squirrel and 1 chipmunk (170547).

MILLER, Prof. LOYE HOLMES, Los Angeles, Calif.: (Through Dr. Carl L. Hubbs) 22 minnows from Sycamore Canyon, southern Arizona (168907).

MILLER, RALPH G., Los Angeles, Calif.: 763 experimentally raised fishes from Salton Sea and Death Valley region, reared in Los Angeles, Calif. (168671).

MILLER, Lt. RICHARD G., Los Angeles, Calif.: 3 young lizards and some unhatched lizard eggs from Makin Atoll, Gilbert Islands, collected by the donor (168535).

MILLER, WALTER S., Altoona, Pa.: 7 snakes, 2 lizards, 5 lots of tadpoles, 2 frogs and a small lot of insects from Oaxaca, Mexico (167195).

MILLS, Dr. H. B. (See under Federal Security Agency, Public Health Service, Hamilton, Mont.)

MINNESOTA, UNIVERSITY OF, St. Paul, Minn.: (Through Dr. Clarence E. Mickel) 6 beetles (169293).

MINOGUE, Lt. JAMES A., Alexandria, Va.: Stone ax found at Fish Lake about 25 miles northwest of Duluth, Minn. (168748).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 48 grasses (168621, exchange).

MITMAN, CARL W., Washington, D. C.: 1 camera shutter and 1 camera lens (168110).

MOLDENKE, Dr. HAROLD N., New York, N. Y.: 10 plants from Pennsylvania (168123, 168590).

MONTAGUE, JEFFRY, G. A., Gloucester, Va.: Quartzite blade taken from an oyster bed in the Ware River, near Ware Neck, Gloucester County, Va. (168880).

MONTE, Dr. OSCAR, São Paulo, Brazil: 25 miscellaneous insects (169753).

MONTGOMERY, JOHN D., A. P. O., San Francisco, Calif.: 1 beetle (169591).

MOORE, Dr. RILEY D. (See under Estate of Dr. Harry M. Vastine.)

MOORE, ROBERT T., Pasadena, Calif.: 1 bird skin (168524).

MOREELL, Admiral G. (See under Navy Department.)

MOREHOUSE, Pvt. ROBERT C., A. P. O., Seattle, Wash.: 98 plants from the Aleutian Islands (168520, 168859).

MORIN, Prof. CLAUDIO V. PAVETTI, Ann Arbor, Mich.: 9 grasses from Paraguay (169918).

MORRISON, Dr. J. P. E., Washington, D. C.: 6,357 American mollusks collected in Indiana, Michigan, Illinois, Wisconsin, Kentucky, etc., during the years 1921 to 1934 (169355); 2 bats from near Fairfax, Va. (170050). (See also under Capt. Graham Fairchild; Col. W. H. W. Komp; Smithsonian Institution; Kay L. Thurman; and Dr. James Zetek.)

MORRISON, MICHAEL P. E., Falls Church, Va.: 5 fishes and 2 crustaceans from near Falls Church (169938).

MORRISON, Lt. RAY E., Washington, D. C.: 3,370 marine shells from the Gilbert, Ellice, Phoenix, and Hawaiian Islands, as well as from Florida, and a few echinoderms and other marine invertebrates (170136); 6 recent shells and 20 fossil (Miocene) shells from 1 mile south of Chesapeake Beach, Md. (170424).

MORSE, Mrs. D. C., Solomons, Md.: 8 bottles of diatom plankton (170565).

MOUNTS, W. W., Washington, D. C.: An automobile duster (coat) (169060).

MULLIGAN, W. F., Berwyn, Md.: 1 nest of a parula warbler (170452).

MUNRO, J. A., Okanagan Landing, British Columbia: 148 fresh-water mollusks from British Columbia (168497); 8 amphipods (169027).

MUNROE, KATHERINE, Washington, D. C.: A chief's ceremonial fan from the Marquesas Islands and a feather ornament from northern South America, collected by Thomas Adamson, grandfather of the donor, about 1900 (168807).

MURRAY, S/Sgt. E. K., A. P. O., New York, N. Y.: 32 insects (168973).

MURRAY, Rev. J. J., Lexington, Va.: 3 birds (168249); 1 skin of a shrike (168755).

MUSEO DE HISTORIA NATURAL, Montevideo, Uruguay: (Through Dr. Diego LeGrand) 19 plants from Uruguay (160496).

MUSEO DE LA PLATA, La Plata, Argentina: (Through Dr. Ángel L. Cabrera) 100 grasses from Argentina (168348), 100 photographs of types of plants in the Herbario Apegazzini (168400, exchange).

MYERS, E. A., & SONS, Mount Lebanon, Pa.: 2 radiocar vacuum-tube hearing sets, Nos. 16354 and 13664 (168425).

MYERS, Prof. GEORGE S. (See under Stanford University.)

NASIF, Sgt. ED. B., A. P. O., San Francisco, Calif.: A Philippine "Victory" stamp on cover and a Philippine "Victory" postcard, also 21 pieces of Japanese paper currency printed for circulation in the Philippine Islands (169865); U. S. airmail envelope, cover bearing 7 Philippine stamps and 25 Japanese 5-centavo stamps issued for use in the Philippine Islands during Japanese occupation (33 specimens) (170462).

NATIONAL ASSOCIATION OF WOMEN ARTISTS, INC., New York, N. Y.: 31 drawings and prints constituting the Association's traveling exhibition of blacks and whites (168200, loan).

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: (Through the Carnegie Museum) 83 amphibians and reptiles from Venezuela collected by the National Geographic Society–Carnegie Museum Venezuelan Expedition, 1928–29 (170220).

NATIONAL MUSEUM OF CANADA, *Department of Mines and Resources*, Ottawa, Ontario: 2 grasses from Yukon (170001, exchange).

NATIONAL PHOTOGRAPHIC SOCIETY, Washington, D. C.: 92 pictorial photographs, Third Annual Salon, September 1–30, 1944 (168632, loan).

NATIONAL RESEARCH COUNCIL, Washington, D. C.: (Through Dr. W. Mansfield Clark) 1 plant from China (170228).

NATIONAL SPELEOLOGICAL SOCIETY, Washington, D. C.: (Through J. S. Petrie) 1 dog skull, some insects, and 1 plant (168442).

NAVY DEPARTMENT, Washington, D. C.: (Through Admiral G. Moreell) 99 original illustrations, published in "Native Woods for Construction Purposes in the Western Pacific Region," revised edition, 1944 (169700, deposit); 4 rats, forwarded by Ensign C. D. Tolman from the Marianas (170352); 11 albino rats and mice (170518).

Bureau of Ships, Washington, D. C.: 12 United States ensigns and 1 pennant flown on United States naval vessels during battles in the southwest Pacific Ocean and the Mediterranean Sea, 1942–43 (169300, deposit).

National Naval Medical School, Bethesda, Md.: 5 rats from the Marshall Islands (168000); (through Lt. Comdr. Donald MacCreary) 20 insects, 3 lizards, and 1 bat (168238); 10 balanoglossids and 149 fishes from Saipan, Marianas Islands (168515); 114 skins and 137 skulls of rats and mice (168596); 104 skins and skulls of rats and mice (168651); 1 squilla, 32 mammals, 4 birds (2 skins and 2 skulls), 90 rats, 44 lizards, 18 snakes, 25 frogs, and 11 mice (168733, 169039, 169502, 169604, 169806, 170059); 7 mollusks from Tinian, Marianas Islands (168822); 15 rats, forwarded by Officer-in-Charge, Rodent Control, Navy 140, Base Hospital No. 6 (168837); 54 mollusks from Tinian, Marianas Islands (169128, exchange); 110 mollusks from Samar, Philippine Islands (169491); 1 rat collected on island of Moesi, in Padaido Islands, Shouten Island group near Biak, Dutch New Guinea, November 2, 1944 (169606); 30 fresh-water snails and 11 rats from the Philippines (169921, 170543); about 285 mollusks from Okinawa (170568).

Naval Medical Research Unit #2: 89 mollusks and 9 reptiles from Saipan (168516); 85 crustaceans, 5 holothurians, 1 ophiuran, 42 fishes, 8 marine shells, 47 mammals, 167 reptiles and batrachians, and 9 insects from Solomon Islands (168638); 29 bird skins, 1 nest, and 1 set of eggs; 26 skins and 28 skulls of mammals (168753); 12 shrimps, 2 crabs, 1 sponge, 2 birds, 1 fish, 326 reptiles and amphibians, 48 mollusks, fragment of cestode, 7 mammals in alcohol, 4 sea-urchins, 45 insects, from Bougainville, Solomon Islands (168766); 99 mam-

mals, consisting of 74 skins, 1 skeleton, and 23 in alcohol; 107 bird skins, 1 bird skeleton, 1 bird in alcohol; 100 reptiles, 1 amphibian, and 2 plants from Bougainville Island (168946).

Office of Naval Operations, Washington, D. C.: Photostatic copies of U. S. Military Government Proclamations Nos. 1–5 and notices on firearms and curfew for the Marshall Islands, printed in English and Japanese (7 specimens) (167864).

U. S. Naval Air Station, Pensacola, Fla.: (Through Lt. (jg) Frank Craighead) 1 pelican (167777).

NEAL, G. MORELY, Toronto, Ontario: 11 slides of a rotifer (163699).

NEBRASKA, UNIVERSITY OF, Lincoln, Nebr.: (Through Dr. H. D. Tate) paratype of insect (168747, exchange).

NEBRASKA STATE HISTORICAL SOCIETY. (See under Work Projects Administration.)

NEIMAN, JACK, Jr., Gatlinburg, Tenn.: 1 model gasoline aircraft engine, "Atom" (168842).

NELSON, A. L. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

NELSON, Prof. CHARLES D., Grand Rapids, Mich.: 4 fresh-water shells from Lower Brower Lake, Mich. (169922).

NELSON, Lt. Comdr. CHARLES M., F. P. O., San Francisco, Calif.: 83 marine shells from the Marianas (169932).

NESBITT, Dr. H. H. J. (See under Canadian Government, Department of Agriculture.)

NEUROHR, Corp. GILBERT. (See under Corp. Frederick M. Bayer.)

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 10 photographs of type specimens of plants (168307); 141 plants from British Guiana and Surinam (169261, 170120, 170200); 497 plants from the western United States (169762, exchange).

NICHOLSON, T 5 A. H., A. P. O., San Francisco, Calif. (See under War Department, Army Medical Museum.)

NICKEL, FRANK F., Maplewood, N. J.: (Through Henry W. Nickel) Thatcher slide rule of about 1883 (169701).

NICKEL, HENRY W. (See under Frank F. Nickel.)

NOEL, ETHEL V., Indianapolis, Ind.: Blue and white, cotton and wool, double-weave jacquard coverlet in modified "Lilies and Stars" pattern, handwoven in 1838 at Bethany, Genesee County, N. Y., for B. Vaneps (168536).

NORTH DAKOTA, UNIVERSITY OF, Grand Forks, N. Dak.: (Through Prof. Neal A. Weber) 5 insects, comprising 4 larvae and 1 pupa (169028).

NORTHROP, Prof. STUART A., Albuquerque, N. Mex.: 4 type specimens of nautiloid cephalopods from the lower Permian, Chupadera formation of New Mexico (170377).

NYLAND, VINCENT, Patuxent, Va.: A Perkins kite, modification of the original Conyne design employed during World War I for elevating the radio aerials (169061).

OELMAN, P. H., Cincinnati, Ohio: 30 pictorial photographs for special exhibition during March 1945 (169818, loan).

OFFICE OF WAR INFORMATION, Washington, D. C.: 19 war posters, 15 duplicates (167949).

OFICINA FITOSANITARIA, Martínez de la Terre, Veracruz: 31 leaf bugs of the family Miridae (169836).

OLMSTED, Dr. A. J., Washington, D.C.: 1 folding dark-room lamp made for travelers and designed to burn candles, 1890 (168555).

OLSON, Pvt. HUGO L., A. P. O., New York, N. Y.: 2 praying mantes (168728).

OLSSON, Dr. A. A., Gloversville, N. Y.: Tertiary larger Foraminifera from Panama, Colombia, Peru, and Ecuador (168931).

O'NEILL, Rev. HUGH. (See under Catholic University of America.)

ORCHARD, C. O., San Antonio, Tex.: 6 marine shells and a collection of beetles from New Guinea (170024).

ORCUTT, C. R., San Diego, Calif.: 179 mosses from Jamaica (112574); 275 plants from Jamaica (112575).

OREGON STATE COLLEGE, Talent, Oreg.: 3 beetles (169294).

ORR, Dr. ROBERT T. (See under California Academy of Sciences.)

OSBORN, BEN, Glen Rose, Tex.: 162 plants from Oklahoma, Kansas, Nebraska, and adjacent States (158387, 169224).

OSBORN, MARY, Park Ridge, Ill.: Pharyngeal bone of a drumfish from Chesapeake Beach, Md. (168096).

OTOYA, FRANCISCO J. (See under Instituto de Ciencias Naturales.)

OWEN, Capt. WILLIAM B., A. P. O., San Francisco, Calif.: 73 mosquitoes comprising 1 holotype, 72 paratypes (170037).

OWENS, E. F., Yoakum, Tex.: 171 grasses from Texas (168718, 168978, exchange).

PAN AMERICAN SANITARY BUREAU, Washington, D. C.: 6 rats collected in Antioquia, Colombia, by Dr. J. A. Montoya (168237). (See also under Dr. Raymond Gilmore.)

PARIODI, Dr. LORENZO R., Buenos Aires, Argentina: 30 grasses from Argentina (168192, 169358, exchange).

PARRY, ALYCE, Washington, D. C.: 1 scarlet tanager (170345).

PASKOW, H. M. (See under William V. Schmidt Co.)

PAULLUS, Lt. J. H., F. P. O., San Francisco, Calif.: 611 insects, comprising 531 adults, 66 larvae, and 1 pupal skin of mosquitoes, and 12 camel crickets collected in the Philippine Islands (170545).

PAYNE, HELEN R., Washington, D. C.: Woolen quilt, pieced in a star and diamond pattern of 1A-inch hexagon patches ornamented with wool-embroidered rose and grape designs, made between 1825 and 1830 at Independence, Mo., by Mrs. Mary Modie (168994, loan).

PEABODY, THOMAS A., deceased, Fort Wayne, Ind.: An Oldsmobile automobile, 1902 (167743, bequest).

PEARSE, Dr. A. S. (See under A. M. Proctor.)

PELAEZ, Dr. D., Mexico, D. F.: 6 bugs (167942).

PENHALLOW, Dr. DUNLAP PEARCE, Washington, D. C.: A mounted moose head from New Brunswick, collected 1890–1900 (168302).

PENN, Lt. GEORGE H., F. P. O., San Francisco, Calif.: 8 crabs, 1 shrimp, 28 hermit crabs, 1 sipunculid, reptiles, mollusks, centipede, and insects, 1 fish (168213); 7 crustaceans, 5 reptiles, 2 frogs, 28 fishes, 2 insects, and 28 mollusks collected at Milne Bay, New Guinea (168551); a collection of natural-history material comprising crustaceans, worms, insects, 45 marine shells, echinoderms, 4 lizards, 4 snakes, 1 frog, and 23 fishes (168813); miscellaneous natural-history specimens (168977); 290 marine invertebrates, 100 insects, 600 mollusks, 14 reptiles, and 1 fish from the Philippines (169655).

PENNSYLVANIA STATE COLLEGE, State College, Pa.: 4 grasses from Pennsylvania (169664, exchange).

PERRY, Dr. STUART H., Adrian, Mich.: 1 specimen of the Odessa, Ector County, Tex., meteorite (168698).

PERRYGO, W. M., Washington, D. C.: 13 birds (warblers, thrushes, starlings, and woodpeckers) (170189).

PETERSON, ALICE V., Washington, D. C.: 1 white-throated sparrow (170300)

PETRIE, J. S. (See under National Speleological Society.)

PFOHL, LOUIS. (See under Design Center, Inc.)

PHAIR, A. W. A., Lillooet, British Columbia: Small collection of insects (167784).

PHELPS, Capt. ALLAN W., A. P. O., San Francisco, Calif.: Basalt adz collected from a shell hole on Saipan (168818).

PHELPS, CHARLES BLANCHARD, Jr., Grosse Point, Mich.: 40 pictorial photographs for exhibition in May 1945 (170142).

PHELPS, WILLIAM H., New York, N. Y.: 8 bird skins (167927, 168258, 168426, exchange).

PHILLIPS, Prof. WALTER S. (See under University of Arizona.)

PHOTOGRAPHIC SOCIETY OF AMERICA, Buffalo, N. Y.: 106 salon prints for special exhibition during August 1944 (168201, loan).

PICKENS, Prof. A. L., Clinton, S. C.: 1 plant (fungus) (168186).

PICKERELL, Capt. D. A., A. P. O., San Francisco, Calif.: 1 moth collected in Dutch New Guinea (170065); 28 insects and spiders (170254).

PICKFORD, Dr. GRACE E., New Haven, Conn.: 21 beetles, representing 11 species (170563, exchange).

PIEL, WALTER, Rehoboth Beach, Del.: Mollusk from Delaware (169166).

PIELTAIN, Dr. C. BOLIVAR, Mexico, D. F.: 3 cave beetles from Mexico (167943).

PITTA, ELPIDIO. (See under A. Renato Semola.)

PITTIER, Dr. H., Caracas, Venezuela: 137 plants collected in Venezuela by T. Lasser (169143).

PLUMMER, Dr. C. C., Mexico, D. F.: 10 specimens of Homoptera, including holotypes of 3 species (166765).

PODTIAGUIN, Dr. B., Asunción, Paraguay: 46 beetles (168105, exchange); 3 birds (168198).

POOLE, Mrs. MARGUERITE, Washington, D. C.: 1 cultivated plant (168950).

POST, JOHN C., Takoma Park, Md.: 1 sharp-shinned hawk (169678).

POST OFFICE DEPARTMENT, Washington, D. C.: 919 postage stamps received from the International Bureau of the Universal Postal Union and described in the bulletins of the Bureau (167857, 168143, 169443, 170030, 170072, 170207); 61 postage stamps and 4 post cards received from the Postal Administration of Great Britain (167857, 168503, 168948, 169077, 170030, 170396); 9 postage stamps from the Royal Netherlands Government at London (167857); Spanish double-barreled pistol made about 1850 (168082); 48 postage stamps of the U. S. S. R. received from the Soviet Postal Union (169077); 2 booklets (180 specimens) of postage stamps issued by the Allied Military Government for use in Italy and Germany, received by the Post

Office Department from the Treasury Department (169443); 3 copies of United States 8-cent airmail stamp (169849); 24 United States postage stamps issued in 1944 (169159); 3 3-cent Florida Commemorative postage stamps (170031); 3 copies of the United States 5-cent United Nations Conference Commemorative stamp (170459).

POTTER, Prof. DAVID, Worcester, Mass.: 1 grass from Massachusetts (169943).

POTZGER, Dr. J. E., Indianapolis, Ind.: 5 plants from Indiana (168193). (See also under Butler University.)

POWERS, Prof. EDWIN B., Knoxville, Tenn.: Approximately 50 parasitic copepods (167671).

PRATT, HARRY D. (See under Federal Security Agency, Public Health Service, San Juan, Puerto Rico.)

PRATT, HELEN S., Eagle Rock, Calif.: 54 plants from California (169955).

PRATT, Dr. IVAN, Wilson Dam, Ala.: 3 phyllopods from Limestone County, Ala. (168206).

PRICE, Sgt. DONALD H., Fort Miles, Del.: 1 leopard frog from Fort Miles, (170255).

PRINCE, F. M. (See under Federal Security Agency, Public Health Service, San Francisco, Calif.)

PROCTOR, A. M., Durham, N. C.: (Through Dr. A. S. Pearse) 1 crab (163881).

QUICK, Sgt. HORACE F., Camp Patrick Henry, Va.: 2 birds from Unalaska (169281).

RABKIN, Dr. SAMUEL, Cincinnati, Ohio: Embryological collection consisting of 32 cleared embryos and fetuses (from about 3 weeks to 6 months), 2 right halves of fetuses sectioned along the midline, 1 maniotic sac, and a set of 4 sections through adult maxillae showing the relation of a molar tooth to the antrum (168841).

RADIO CORPORATION OF AMERICA, *RCA Victor Division*, Camden, N. J.: D-Day Album containing 4 double-faced records bearing portions of the program broadcast by National Broadcasting Company on D-Day, June 6, 1944 (169952).

RAMSAY, Mrs. HELEN SLATER, Dalton, N. Y.: (Through Hon. James M. Mead) Silhouette of Nathaniel Boothe Nichols made about 1875 (169446).

RANGONESE, ARTURO E. (See under Instituto Experimental de Investigación y Fomento Agricola-Ganadero.)

RAPP, Ensign FLOYD A., Brooklyn, N. Y.: An australite found 75 miles east of Perth, Southwest Australia (168296).

RAPP, WILLIAM F., Jr., Urbana, Ill.: Ill.: 1 amphipod, 6 isopods, 2 parasitic worms, 8 mollusks (168501, (169262, 169427, 169773); 2 isopods from Reelfoot Lake, Tenn. (170197); 4 amphipods from Staten Island, N. Y. (170360).

RAPPAPORT, Capt. IRVING, A. P. O., San Francisco, Calif.: 21 fresh-water snails from Leyte, Philippines (170201).

RAWSON, Prof. D. S., Saskatoon, Saskatchewan: 25 amphipods, 5 mysids (170209).

RAY, Dr. CYRUS N., Abilene, Tex.: Incomplete skeleton with fragmentary skull (known as the J. C. Putnam skeleton) found along Clear Fork of Brazos River, 1943 (169699).

REED, CLYDE F., Baltimore, Md.: Fern from Maryland (169242).

REED, Dr. EDWYN P., Valparaiso, Chile: 96 insects (170044).

REED, ERIK K. (See under Department of the Interior, National Park Service.)

REED, FRED, Christchurch, New Zealand: 10 samples of diatomaceous earth from Oamaru, New Zealand (various deposits) (168477).

REED, Mrs. MARY STAFFORD, Washington, D. C.: 10 sample books of cotton and wool prints with recipes for dyeing and printing, used in England and in Dover and Manchester, N. H., by an English dyer, Thomas Stafford, uncle and father by adoption of the donor, and a printed copy of the "Defendant's Record on Final Hearing" of a suit in equity title John Bracewell vs. Passaic Print Works," wherein Thomas Stafford is the principal witness (167988).

REEDER, JOHN, Oak Park, Ill.: 108 grasses from California (169565).

REEDER, Sgt. JOHN R., A. P. O., San Francisco, Calif.: 8 grasses (168032).

REESIDE, Dr. JOHN B., Jr., Washington, D. C.: 436 mollusks from Montana and Wyoming (170600). (See also under Burton J. Westman.)

REEVES, Col. DACHE M., Alexandria, Va.: Photographs, engravings, and an etching of Stonehenge near Salisbury, Wiltshire, England (167938); 4 prehistoric stone implements from England presented to the donor during his 1944 sojourn in England (170049).

REGAN, S. D., Fort Lauderdale, Fla.: 2 specimens of hardwoods from tropical America (169158).

REHDER, Dr. HARALD A., Washington, D. C.: 9 mollusks from Roland Park, Center Ossipee, N. H. (168217).

REIMANN, IRVING G., Buffalo, N. Y.: About 250 Silurian and Devonian corals from western New York (167631).

REINHARD, Dr. E. G., Washington, D. C.: 10 cotypes of a parasitic crustacean (169821).

REINHARD, H. J., College Station, Tex.: 38 flies (170163).

RESNER, ERNEST, F. P. O., San Francisco, Calif.: 2 crabs (169157).

RHOADES, Dr. RENDELL, Blanchester, Ohio: 3 cotypes of crayfish (168054); 17 marine invertebrates, 10 mollusks, 1 starfish, 1 fish collected by the late Corporal Howard in Italy (169080).

RHODE ISLAND DEPARTMENT OF AGRICULTURE AND CONSERVATION, Kingston, R. I.: (Through C. C. Jennings) A small collection of mites taken from tomato plants in Rhode Island (166684).

RHODES, CHARLES E., Shrewsbury, Mo.: 9 crinoids from Missouri, all of Mississippian age (169534, exchange).

RICE, HAROLD B., Shoemaker, Calif.: 61 specimens of Japanese medical-military objects taken at Tarawa, Guadalcanal, and Tulagi (168283, loan).

RICE, WILLIAM S., Oakland, Calif.: 40 block prints for special exhibition from October 23 through November 19, 1944 (168815, loan).

RICHARDS, Dr. HORACE G., Philadelphia, Pa.: 3 specimens of Tertiary Bryozoa from Virginia and North Carolina (169171).

RICKER, P. L., Washington, D. C.: 2 photographs of plants (168811); 10 plants from the George Washington National Forest (168836).

RIKER, VILLION E., F. P. O., San Francisco, Calif.: 1 bird egg from Tinian Island, Marianas (169527).

RIKER, WILLIAM A., Norwich, Conn.: 1 pair of ice skates, ca. 1880 (168403).

RIPLEY, S. DILLON, Washington, D. C.: 354 bird skins and 1 skeleton from Ceylon (164398, 170221).

RITCHER, Dr. PAUL O., Lexington, Ky.: 3 vials of scarab larvae (164697, exchange); 25 beetles and larval skins of certain species, representing 4 species (168025); 14 beetles (168090); 14 beetles (12 third-stage larvae and 2 reared adults) (168476); 33 beetle larvae representing 8 species (169695; exchange); 2 beetle larvae (170494).

RIVAS, LUIS RENÉ, Habana, Cuba: 58 fishes, including 43 paratypes, and 2 crayfishes from Cuba and Mexico (168055).

ROBERTS, Dr. F. H. H., Jr. (See under Dr. J. D. Figgins.)

ROBERTS, Mrs. NORMAN L., Topeka, Kans.: Archeological specimens collected near Manhattan, Kans., by the late Dr. Norman L. Roberts (168543).

ROBINSON, Mrs. CLARENCE J., Alexandria, Va.: 4 pieces of brocaded silk dress fabrics, 1 brocaded moire ribbon, 3 examples of needlework, and 1 piece of pen-and-ink work on cotton muslin, representing the periods of 1821, 1846, and 1866, all owned by the donor's grandmother, Mrs. William F. Haines, Corondelet, St. Louis, Mo. (170225).

ROCKEFELLER FOUNDATION, *Divisão Sanitaria International*, Rio de Janeiro, Brazil: 13 specimens of mosquito material representing 7 specimens, 6 of them by paratypes (169610).

ROEBLING FUND, Smithsonian Institution: A collection of 8 minerals from Mexico, comprising 2 argentites from Guanajuato, 2 native silvers from Batopilas, 1 legrandite from Coahuila, 1 argularite from Taxco and 1 stephanite and 1 pyrargyrite each from Zacetecas (168220); a sapphire weighing 9.46 carats from Ceylon (168159); 1 specimen of the Drum Mountains, Millard County, Utah, meteorite, weighing 1,164 pounds (168531); a set of 8 Chinese jades (168626); 1 green beryl, Wray mine, Yancey County, N. C., 39,157 carats (168781); a collection of calcite crystals from La Aurora mine, Areponapuchic, Chihuahua La Fe Mine, Rodeo, Durango, Mexico (169466): 1 cat's-eye chrysoberyl from Ceylon (169608); 1 natrolite from Livington, Mont. (169718); 1 phenacite weighing 9.94 carats and 1 diopside weighing 11.34 carats (169899); 2 specimens of quartz from Pacu, Minas Gerais, Brazil (170561).

ROESEN, OSCAR C., New York, N. Y.: Marconi coherer, 1906 (169267); an aircraft wireless transmitter, designed, built, and successfully tested by donor in 1911 (168821).

ROGERSON, T/Sgt. CLARK T., A. P. O. San Francisco, Calif.: 10 moths and butterflies (167915); 29 butterflies representing 16 species, of which 8 are new to the collections (168324); a small collection of Lepidoptera from the South Pacific (168629); 1 small collection of beetles from Bougainville (?) (168951); 153 butterflies (169495); 17 specimens of Lepidoptera from the Philippines (170527).

ROJAS, TEODORO, Jardin Botánico, Paraguay: 76 grasses from Paraguay (168069).

ROLLER, JANE H., Washington, D. C.: A white-throated sparrow (168829); 60 land snails from the District of Columbia (169863).

ROLLER, P. S., College Park, Md.: A specimen of kaolin from Ringgold,

Tenn., and 1 each of kaolin and bauxite from McIntyre, Ga. (168762).

ROOS, ALFRED, Washington, D. C.: Specimen of native copper pseudomorph after azurite from Copper Rose mine, Grant County, N. Mex. (168780).

ROOSEVELT, Mrs. FRANKLIN D., Hyde Park, N. Y.: Mauve crepe dress worn by the donor at the afternoon reception given at the White House, January 20, 1945, on the occasion of the fourth inauguration of President Franklin D. Roosevelt (170349); dress and accessories worn by donor at the inaugural ceremonies on the morning of March 4, 1933 (170497).

ROSENBLATT, MARTIN S., San Francisco, Calif.: A collection of miscellaneous Chinese jades (168666).

ROSENGURTT, Dr. BERNARDO, Estación Juan Jackson, Uruguay: 55 plants from Uruguay (168317, 168873); 98 plants and 11 grasses from Uruguay (167998, 169665, 169997, 170098, 170354, exchange).

Ross, Dr. H. H., Urbana, Ill.: 1 lepidopterous larva (169653). (See also under Illinois State Natural History Survey Division.)

ROTH, Lt. LOUIS M., Fort McPherson, Ga.: 167 slides of mosquito material from the southeastern United States (167904); 176 specimens of mosquito material comprising specimens from the southern United States and from New Guinea (168883). (See also under War Department, 4th Service Command Medical Laboratory.)

ROWAN, Mrs. ANDREW SUMMERS, San Mateo, Calif.: (Through Odus C. Horney) Medal of the Cuban Order Carlos Manuel de Sespedes, awarded by the Cuban Government to Col. Andrew Summers Rowan, U. S. Army, in recognition of services during the Spanish-American War, 3 documents relating to the medal and services for which it was awarded, and Col. Rowan's military saber (168116).

ROWAN, EDWARD, Falls Church, Va.: 1 hybrid black-hooded red siskin × canary (170476).

RUNDLETT, EDWIN, Staten Island, N. Y.: A small collection of lepidopterous larvae, wood-feeders (168986).

RUNYON, ROBERT, Brownsville, Tex.: 8 plants from Texas (169964).

RUSK, LOU BABB, Campbell, Calif.: A blue-and-white, cotton-and-wool, overshot weave coverlet, "Pinebloom," probably made in Virginia by the donor's great-grandmother, Mrs. Johnston; also a sash-length of satin-striped grosgrain ribbon which was worn by the donor in 1880 (168187).

RUSSELL, AGNES, Washington, D. C.: 1 ovenbird (169032).

SAALFRANK, WILLIAM, Takoma Park, Md.: Approximately 75 specimens of Mississippian invetebrate fossils from the west edge of St. Louis, Mo. (169120).

SALISBURY, Dr. E. J. (See under British Government, Royal Botanic Gardens.)

SALTER, W. E., Washington, D. C.: Fragment of sea-turtle shell from Parkers Creek, Calvert County, Md. (168215).

SAMPSON, A. H. (See under White & Wyckoff Manufacturing Co.)

SAMPSON, Prof. ARTHUR W., Berkeley, Calif.: 27 plants and 25 grasses from Pacific Islands (168066, 168369 169326); 24 plants from the Russell Islands, Melanesia (169999).

SÁNCHES, JOSÉ, Mexico City, Mexico: 64 ferns from Mexico (168047, 168658)

SANDERS, J. G., Tingo María, Peru: 12 snakes and 1 caecilian from Fundo Sinchona, Peru (168207); 7 specimens of fancy woods from Peru (168749).

SAUNDERS, Capt. H. E., Washington, D. C.: 1 shrike (169855).

SCATTERGOOD, LESLIE W., Boothbay Harbor, Maine: 1 crab (168526).

SCHAEFFER, Prof. ASA A., Phildadelphia, Pa.: 1 shrimp (169062).

SCHENTHAL, Capt. JOSEPH E. (See under War Department, Army Service Forces Training Center.)

SCHIEFER, Dr. HELEN, Bogotá, Colombia: 1 plant from Colombia (169920).

SCHMIDT Co., WILLIAM V., New York, N. Y.: (Through H. M. Paskow) 1 opal weighing 10.62 carats from Querétaro, Mexico (170451); 1 purple fluorite, weighing 9.55 carats(170562).

SCHNEIDER, C. H., New York, N. Y. 22 specimens of nickel ores from New Caledonia (168355).

SCHOLS, I. H., Paramaribo, Surinam: Specimen of gibbsite (168514).

SCHROEDER, WILLIAM C. (See under Harvard University, Museum of Comparative Zoology.)

SCHULTZ, JAMES B., Takoma Park, Md.: Dental plate of a fossil ray from near Scientists Cliff, Md. (169727).

SCHWENGEL, Dr. JEANNE S., Scarsdale, N. Y.: 10 marine shells from Florida and Australia (169850).

SCOTT, J. H., San Francisco, Calif.: 1 scheelite specimen from Riverside Tungsten mine at Hyder, Alaska (168418).

SCRIPPS INSTITUTION OF OCEANOGRAPHY. (See under California Division of Fish and Game.)

SCULLEN, Prof. H. A., Corvallis, Oreg.: 1 insect (168710, exchange).

SEGHETTI, Dr. LEE, Bozeman, Mont.: 13 fresh-water snails from Montana (168791).

SELF, Dr. J. TEAGUE, Norman, Okla.: Type and 4 paratypes of helminths from Wichita Mountains Wildlife Refuge (170427).

SEMOLA, A. RENATO, and ELPIDIO PITTA, Espera Feliz, Brazil. (Through D. M. Larrabee) A crystal of muscovite from Urubu mica mine (169864).

SEMPLE, ARTHUR T. (See under Foreign Economic Administration.)

SENN, Dr. ALFRED, Barbados, British West Indies: Tertiary larger Foraminifera from Morocco, North Africa (168933).

SEVERIN, Prof. H. C., Brookings, S. Dak.: 4 mollusks from South Dakota (169636).

SHARER, Pfc. A. W., Cleveland, Ohio: 46 amphibians and reptiles from Camp Crowder, Mo., and Vint Hill Farms Station, Va. (168372).

SHENEFELT, Dr. ROY D., Pullman, Wash.: 2 paratypes of Hymenoptera (168164).

SHOPE, Comdr. R., Princeton, N. J.: 12 fresh-water shells from New Jersey (168323).

SIBLEY, CHARLES L., F. P. O., San Francisco, Calif.: (Through Dr. A. Wetmore) 12 specimens of Japanese paper currency of the period of World War II (169992); 9 specimens of Japanese paper currency of the period of World War II (170477).

SIDES, N. W. (See under Eureka Mica Mining Co.)

SILBAUGH, R. A., Washington, D. C.: 1 red-eyed vireo (170393).

SIMON, Lt. JAMES R., A. P. O., San Francisco, Calif.: 27 fishes collected in New Guinea by Capt. Ralph F. Honess (168124); 145 fishes from the Hawaiian Islands (169884).

SIMPSON, Mrs. ROXIE COLLIE, Washington, D. C.: 5 eggs of boat-tailed grackle (170574).

SINCLAIR, CHARLES C., Washington, D. C.: 1 blackpoll warbler (168541).

SKINNER & SONS, WILLIAM, New York, N. Y.: A series of specimens showing the screen printing process of ornamenting a jacquard-figured rayon crepe with a 3-colored war-inspired motif, and the actual screens used for the application of each successive color, also a specimen of nylon camouflage cloth (170051). (See also under Spool Cotton Co.)

SLATER, LYDIA R. (See under Georgia Slater Bartlett.)

SMITH, ALLYN G., Berkeley, Calif.: 1 mollusk from China (Cabrillo) Point, near Pacific Grove, Calif. (170425).

SMITH, G. STACE, Creston, British Columbia: 8 beetles (169279); (through J. W. Green) 4 beetles (169994).

SMITH, Mrs. HUGH M., Washington, D. C.: Palm leaf fan used by Burmese Buddhist priest (168678).

SMITH, Dr. M. R. (See under Prof. Kenneth W. Cooper.)

SMITH, OLIVE COLE, Mount Pleasant, Iowa: 1 paint box containing bladders, tins, and packets of pigment used by Deborah Goldsmith Throop about 1830 (168997).

SMITH, Dr. RALPH H. (See under University of California.)

SMITH, Prof. ROGER C., Manhattan, Kans.: 112 insects, representing 43 species, 6 of which are represented by 14 paratypes (170139, exchange).

SMITHSONIAN INSTITUTION, Washington, D. C.: The Arthur Michael collection of early American silver (162866); royal Hawaiian feather cape (*ahuula*) (169696); 1 line engraving, "The Flight into Egypt," by Carl M. Schultheiss, A. N. A., the annual associate member's print of the Society of American Etchers (170258); 1 portrait of George Eastman, framed (170532); 7 etchings by C. W. Sherborn (170549); 76 copper plates containing work in etching, aquatint, and drypoint by Charles W. Dahlgreen (170550). Deposit.

Bureau of American Ethnology: 8 ethnological specimens collected by J. N. B. Hewitt from the Iroquois Indians of the Six Nations Reserve, Grand River, Ontario, Canada, and by James Mooney from the Cherokee of North Carolina (168929); a collection of spoons and fishhooks from the Indians of the Northwest Pacific Coast of British Columbia and southeast Alaska and a bone skin scraper from the Alaskan Eskimo, all from the estate of David I. Bushnell, Jr. (168052); a collection of arrows, skin quivers, and headdresses from the Hupa Indians, Humboldt County, Calif., collected by E. G. Johnson (168260); 1 #3–A autographic, folding pocket kodak of 1914 (168552).

National Museum, collected by members of the staff: Chapin, Dr. Edward A.: A small collection of insects, mollusks, and crustaceans from Chile (169993); Conger, Paul S.: 12 bottles of diatom material from Chesapeake Bay (170566); Cooper, Dr. G. Arthur: Approximately 1,000 Middle Ordovician

invertebrate fossils collected in Virginia and Tennessee during October 1944 (169118), collection of Cambrian, Devonian, Mississippian, and Permian fossils from Sonora, Mexico (167698), 350 invertebrate fossils from the Middle Ordovician Chambersburg limestone of southern Pennsylvania, Maryland, and northern Virginia (168196); Killip, E. P.: 2,400 plants and 1 piece of wood collected in Colombia in 1944 (166783); Taxidermist Shop: 3 sparrows and 1 starling (169034); Watkins, William N.: Trade samples of the woods of sugar pine, ponderosa pine, and sycamore (170303); Wedel, Dr. Waldo R.: 5,677 specimens of archeological and skeletal material from Indian village and burial sites in Scott and Lane Counties, Kans., and surface collections from Buffalo and Sully Counties, S. Dak. (168615); archeological materials from a large rock shelter on the east rim of the Purgatoire River canyon about 20 miles east of Model, Las Animas County, Colo., 1938 (168676); Wetmore, A., and J. P. E. Morrison: 587 birds, 76 mammals, 25,000 mollusks, 99 helminths, 900 crustaceans, 347 reptiles and batrachians, 1,180 fishes, 24 echinoderms, 3,000 insects, 12 archeological specimens, and 1 specimen of wood (168826).

National Museum, made in Museum laboratories: Casts of type specimens of fossil bird bones from originals in Harold Cook collection, Agate Springs, Nebr. (164735).

National Museum, obtained by purchase: 314 plants from Venezuela (168546); a brass sewing bird or hemming clamp (169319); 4,838 photographs of type specimens of plants (169583); seamless, single weave, jacquard type coverlet, having cotton tabby foundation overlaid by pattern wefts of colored 2-ply wool yarns bound into the fabric by every fourth warp which give a small "bird-eye" effect to the ground, woven in 1845 by C. Fehr, in Emaus, Lehigh County, Pa. (169760); 3,162 photographs of type specimens of plants in European herbaria (170434).

National Zoological Park: 37 mammals (168300, 169630, 170546); 2 bird skins and 29 bird skeletons (168478, 169852, 170223); 5 ethnological specimens from the Kiriwina, Mormanby, and Woodlark Islands, Eastern New Guinea, collected by Lt. John H. Fulling (168617); 1 South American lungfish (168906); 33 specimens of fishes, from the East Indies, Africa, and South America (170237).

SMYTH, S/Sgt. A. V., A. P. O., San Francisco, Calif.: 26 plants from New Guinea (170317).

SNOW, W. E., Urbana, Ill.: 5 beetles from Illinois (169235).

SONOTONE CORPORATION, Elmsford, N. Y.: 2 sets of Sonotone hearing aids (168424); 17 sets of hearing aids whicb illustrate steps in the evolution of this type of apparatus (169582).

SORENSEN, A., Pacific Grove, Calif.: 1 mollusk and 1 alcyonarian (170154).

SOUKUP, S. S., Dr. J., Lima, Peru: 136 plants from Peru (168940).

SOUTHWORTH, CHARLES, Thedford, Ontario: Approximately 500 specimens of Devonian brachiopods from southwestern Ontario (169132).

SOXMAN, G. M., Dallas, Tex.: 1 fern from Texas (169017).

SPERRY, Dr. OMER E., Alpine, Tex.: 2 plants from Texas (169288).

SPOOL COTTON Co., and CROWN FASTENER CORPORATION, New York, N. Y.: (Through William Skinner & Sons) A machine-gun turret-slot installation for Bendix turret, having a carrier through which the gun barrel protrudes, and with tackle twill extending the tape of the double-acting slide fastener (168291).

SPRINGER, STEWART, Fort Myers, Fla.: 1 fish taken from mouth of tiger shark (169503).

SPRINGER FUND, Smithsonian Institution: 10 crinoids from the Mississippian rocks on the west edge of the city of St. Louis, Mo. (169119); 7 Devonian crinoids (169618).

SPURLOCK, Rev. W. RANDALL, Warner Robins, Ga.: Sioux Indian moccasins, beaded charm, and beaded bags, collected on the Rosebud Indian Reservation, S. Dak., 1905 (169986).

STANDARD BRUSH & BROOM Co., Portland, Ind.: (Through Dr. F. A. McClure) 5 specimens of broom fibers—bass, bassine, bahia, palmyra, and palmyra stalks (169731).

STANFORD UNIVERSITY, *Natural History Museum*, Stanford University, Calif.: (Through Prof. George S. Myers) 12 fishes (paratypes) from Venezuela (164121).

STANLEY-BROWN, Mrs. JOSEPH, Kew Gardens, N. Y.: (Through Mrs. Herbert Feis) Collection of wooden masks and miniature totem poles from Indians of the Northwest Pacific Coast, collected by the late Joseph Stanley-Brown (168051).

STAUBER, Dr. LESLIE A., New Brunswick, N. J.: 10 crabs, representing various stages in the life cycle (170231).

STEARNS, J. L., Laurel, Md.: 1 wood specimen each of the chinaberry tree and the poison-ivy vine, collected by the donor (170548, exchange).

STEBBINS, Dr. G. LEDYARD, Jr., Berkeley, Calif.: 10 grasses from western United States (168956).

STEHLÉ, Dr. H., Fort-de-France, Martinique: 295 plants from Martinique and Guadeloupe (168329, 169629, 170171); collection of insects, 26 frogs and 4 lizards from Martinque (168525, 169566, 169860); 3 Lepidoptera from Tivoli, Martinique (169149); 2 ferns from the West Indies (169570).

STEIGLEMAN, FORREST E., Baltimore, Md.: 1 miniature dental articulator, complete with miniature upper and lower dentures, for addition to dental collection (168480).

STEPHENSON, Dr. L. W., Washington, D. C.: 7 mollusks from Texas (167919).

STERNER, ALBERT, Richmond, Mass.: 29 prints for special exhibition from September 25 through October 22, 1944 (168486, loan).

STERNFELT, Comdr. CARL W., Washington, D. C.: 39 reproductions of historic flags (168221).

STEVENS, EVERETT MELLEN, EVERETT MELLEN STEVENS, Jr., CHARLES WILLIAM STEVENS, and MARY ELIZABETH STEVENS, Nashua, N. H.: A pictorial linen damask tablecloth with medallion portrait of George Washington, used at Butterfield Tavern in Westford, Mass., during the 1830's (168261).

STEVENS & Co., INC., J. P., New York, N. Y.: 9 specimens of dress, shoe, and war fabrics made of various types of rayon yarns in the mills of S. Slater and Sons, Inc., Slater, N. C. (169505).

STEYSKAL, GEORGE, Detroit, Mich.: 9 flies (169498, 169795, 169831).

STICKEL, T/5 WILLIAM H., A. P. O., San Francisco, Calif.: Large collection of reptiles and amphibians from New Guinea (168422).

STIEGLER, Maj. H. W. (See under Mrs. W. Lee Lewis.)

STODDARD, Lt. C. H., St. Paul, Minn.: 20 small wood specimens collected by donor on Bankia Island, Russell Islands, Solomons (169954).

STODDARD, HERBERT L., Thomasville, Ga.: 34 birds from Georgia (167823).

STONE, Dr. ALAN. (See under Lt. (jg) J. N. Hutzel.)

STONE, BENTON, Negritos, Talara, Peru: 3 slides of Peruvian Upper Eocene Foraminifera, consisting of holotype, paratype, and 6 topotypes (170155).

STONE, JOSEPH C., F. P. O., New York, N. Y.: 1 bird spider (168166).

STONER, Mrs. DAYTON, Albany, N. Y.: 9,874 insects, comprising 4,256 Heteroptera, 2,062 Coleoptera, and 56 Homoptera and 3,500 miscellaneous insects, the property of the late Dayton Stoner (167884).

STRAUSS, EDWARD, Washington, D. C.: 1 "Expo" camera, 1904 (a miniature) (168505).

STRONG, E. E., Miami, Fla.: 1 Eastman #1 Pocket Kodak, ca. 1892, 1 Criterion view camera, Gundlach-Manhattan Optical Co., and 3 plate holders (168229).

STULLKEN, Lt. (jg) DONALD D., Pensacola, Fla.: 1 western burrowing owl (170375).

STUNTZ, Lt. STEPHEN, Jr., Washington, D. C.: 1 butterfly (167948).

SUNDAY EXPRESS PUBLISHING CO., Chenty, China: Chinese booklet entitled "Immortal Roosevelt" (170501).

SUSSANNE, Mrs. NATAL, Miami Beach, Fla.: 1 miniature painting on glass (168057).

SWARTZWELDER, Maj. J. C. (See under War Department, Office of the Surgeon General.)

TATE, Dr. H. D. (See under University of Nebraska.)

TAYLOR INSTRUMENT COMPANIES, Rochester, N. Y.: 1 Tycos Aneroid Sphygmomanometer $5090 (168398).

TEETERS, ROBERT. (See under Orville R. Edner.)

TEMPLEMAN, Dr. W., St. John's, Newfoundland: 15 harpacticoid copepods from external surface of lobster, representing a new genus and a new species (158737).

TENNESSEE DEPARTMENT OF CONSERVATION, *Division of Geology*, Nashville, Tenn.: (Through Kendall E. Born) 7 specimens of Middle Devonian Pegram sandstone from west Tennessee, containing invertebrate fossils (168727).

TERRY, ROBERT A., Centerville, Calif.: Tertiary larger Foraminifera from Panama (168932).

TEXAS, UNIVERSITY OF, Austin, Tex.: 239 plants, mostly from Texas (167847, 168854, 169420, gift-exchange); (through Dr. Fred A. Barkley) 48 plants from Texas (168325, exchange).

THIESSEN, Maj. ALFRED E., Arlington, Va.: 63 Philippine woods (170510).

THOMAS, JAMES H., Oneonta, N. Y.: 50 pictorial photographs for special exhibition during April 1945 (169903, loan).

THOMAS, Maj. WILLIAM B. S., Washington, D. C.: 1 twin crystal from near Accra, Gold Coast, Africa (169416).

THURBER, GRETCHEN O., Providence, R. I.: 1 Adler typewriter, ca. 1900 (168622).

THURMAN, KAY L., Vernal, Utah: (Through Dr. J. P. E. Morrison) 2 deer (169087).

TIDD, Dr. WILBUR M., and Dr. RALPH V. BANGHAM, Columbus, Ohio: Holotypes of 2 new species of copepods and paratypes of 1 species (169497).

TIMBERLAKE, P. H., Riverside, Calif.: 16 bees representing 9 named species (167971).

TISSOT, Dr. A. N. (See under University of Florida and Florida Agricultural Experiment Station.)

TITTERINGTON, Dr. P. F., St. Louis, Mo.: 1 lot of potsherds from the Andrew Snyder village site (Hoewellian) near Mount Victory School, Richwood Township, Calhoun County Ill. (168259).

TODD, Dr. A. C., Baton Rouge, La.: Holotype and paratype each of 2 new species of nematodes (167965).

TOLLEFSON, Sgt., A. P. O., San Francisco., Calif.: A small collection of Lepidoptera from the Solomon Islands (170526).

TOLMAN, R. P., Washigton, D. C.: 7 portraits engraved about 1850 by A. H. Ritchie in mezzotint combined with mixed methods (168992); 96 Christmas cards by various artists, selected from the donor's collection for special exhibition from December 18, 1944, through January 14, 1945 (169244, loan).

TOWNSEND, Dr. C. H. T., São Paulo, Brazil: (Through Capt. David G. Hall) 1,860 flies, including 4 paratypes of 3 species (170218).

TRANSCONTINENTAL & WESTERN AIR, INC., Washington, D. C.: Display model of a TWA Boeing Stratoliner (33-place transport for substratosphere operations) (168228); display model of Douglas Day-Sleeper Transport DC–3 or DS–T (169683); display model of "Constellation" plane built for TWA by Lockheed (169243).

TREASURY DEPARTMENT, Washington, D. C.:

Bureau of the Mint: United States coins struck at the Denver, Philadelphia, and San Francisco mints in 1944 (30 specimens) (169905).

Bureau of Customs: A collection of 160 semiprecious stones (170319).

TROMBINO, TONY, F. P. O., San Francisco, Calif.: 1 mollusk (170376).

TRUITT, Dr. R. V., College Park, Md.: 2 crabs and 65 oysters (170246).

TUERK, Capt. MILTON, A. P. O., New York, N. Y.: A package of seeds from Burma (170060).

TUTCHINGS, Mrs. EVERETT, New York, N. Y.: 29 portrait miniatures in a single frame, made by Pirie MacDonald, father of the donor, in Albany, N. Y., 1890–1900 (169846).

TUTHILL, Dr. L. D. (See under Iowa State College.)

TUTTLE, Mrs. MACOWIN, South Bristol, Maine: Water lens and stand patented in 1881 by C. J. Dehyle and a magnifying glass (168171).

UNDERWOOD, Mrs. P. O., Detroit, Mich.: 1 mollusk (170413).

UNITED STATES ANTARCTIC SERVICE, Washington, D. C.: 42 bird skins, 18 bird skeletons, and 1 seal skull (169054).

UNITED STATES OF AMERICA TYPHUS COMMISSION, Washington, D. C.: 18 small mammals from Egypt (169603); (through Maj. Glen M. Kohls) 1 kangaroo collected by Major Kohls in New Guinea, March 15, 1944 (169737); 15 small mammals, including 5 squirrels, 2 mice, 7 rats, and 1 shrew, shipped by Capt. Kenneth E. Stager from Burma (170073); 5 rats in alcohol shipped by Lt. Col. Cornelius B. Philip, Philippine Islands (170126); 2 rats forwarded by Lt. Harry Hoogstraal (170128); 83 birds and 22 mammals from Burma (170490).

URIBE, Dr. LORENZO URIBE, Bogotá, Colombia: 20 plants from Colombia (168683, 168667, 170129).

VAIDEN, M. G., Rosedale, Miss.: 2 song sparrows (169596, exchange).

VAIL, Comdr. S. P., Dallas, Tex.: 2 dobsonflies (168421); 4 insects (168763).

VALENTINE, Dr. J. M., McLean, Va.: 13 beetles including 7 holotypes and 6 paratypes (168393).

VALERIO, Prof. MANUEL, San José, Costa Rica: 101 mollusks and 323 insects from Costa Rica and Cuba (167168).

VAN SCHAAK, Lt. G. B., F. P. O., San Francisco, Calif.: 241 plants from the Aleutian Islands (168737, 170408, 170463).

VARGAS, C., Dr. CESAR, Cuzco, Peru: 77 plants from Peru (168184).

VARGAS, JESÚS MENDOZA, Veracruz, Mexico: 10 mollusks from Tapapulum, Misantla, Veracruz, Mexico (169285); 67 land shells from Mexico (170359).

VARGAS, Dr. LUIS, Mexico, D. F.: Small collection of mosquitoes including adults and pupae, representing 5 species (167953).

VARRELMAN, Dr. F. A., Washington, D. C.: 21 plants from Guatemala (170304).

VASTINE, ESTATE OF Dr. HARRY M., Harrisburg, Pa.: (Through Mrs. Leon Klepper and Dr. Riley D. Moore) 12 specimens pretaining to the early history of osteopathy (170381).

VAUGHAN, Dr. T. WAYLAND (See under R. Wright Barker.)

VENEZUELA SERVICIO BOTÁNICO, *Ministerio de Agricultura y Crio*, Caracas, Venezuela: Photograph of plant (169121, exchange).

VERDUIN, L. C. (See under L. H. Kaltenberger.)

VERRILL, A. HYATT, Lake Worth, Fla.: 4 mollusks from Florida (170426).

VIKEN, A. J., Manhasset, N. Y.: 1 Beidler-Viken twin camera, 2 Ilex photoplastic lenses, and 1 Ilex Universal shutter (168169); booklet of panorama views on the estate of Mrs. George D. Pratt, Glen Cove, Long Island, N. Y. (168241, loan).

VIRGINIA, UNIVERSITY OF, *Miller School of Biology*, Charlottesville, Va. (Through John G. Mahan) 1 slide of new species of turbellarian worm (170436).

VISEL, GLADYS, Washington, D. C.: 7 plants from Washington, D. C. (168306, 168782).

VOGTMAN, T/5 DONALD B., A. P. O., San Francisco, Calif.: A collection of miscellaneous insects from Netherlands New Guinea (170429).

VONDELL, JOHN H., Amherst, Mass.: 40 pictorial photographs for exhibition during September 1944 (168405, loan).

WAGNER, Lt. (jg) WARREN H., Jr., F. P. O., San Francisco, Calif.: 60 ferns from Puerto Rico (167845); 32 ferns from Oahu and Guam (169782); 6 ferns from Maryland (167939); 356 butterflies (167944); 74 ferns from Pacific Islands (169346); 115 butterflies from the Marshall and Admiralty Islands, Saipan, and Guam, also a few other insects (169520); (with Lt. (jg) D. F. GRETHER) 182 specimens of Lepidoptera from Hawaii, the Marshall Islands, Los Negros, and Manus, Admiralty Islands, Guadalcanal, and the Philippines (170524).

WALCOTT FUND, Smithsonian Institution: Approximately 3,000 specimens of lower Devonian silicified fossils, 200 middle Devonian fossils from the eastern Catskill region in the vicinity of Saugerties, N. Y. (167820).

WALES, JAMES ALBERT. (See under James A. Wales Jr., Richard Beach Wales, and Nancy Holbrook Wales.)

WALES, JAMES A., Jr., RICHARD BEACH WALES, AND NANCY HOLBROOK WALES, New York, N. Y.: (Through James A. Wales) Original model of Alfred Ely Beach's typewriter for the blind, patented 1856, and 2 McDonough wall-type telephones ca. 1887, donated by the great-grandchildren of Alfred Ely Beach (163196).

WALKER, DR. EGBERT H., Washington, D. C.: 15 plants and 1 fern from District of Columbia, Maryland, Virginia, and Pennsylvania (168006, 168262, 170432).

WALKER, ERNEST P., Washington, D. C.: Parasitic worm from Occoquan, Va. (168098); a collection of stone lamps, a fox trap, lance points and other ethnological specimens of the Eskimo of Kodiak Island, a Russian teakettle of copper, all collected in Alaska by the donor (168304); 1 hamster (168301).

WALKER, Maj. Gen. WALTON H., A. P. O., New York, N. Y.: Bronze bust of Adolf Hitler (169202).

WALLACE, Lt. (jg) CHARLES, Bellevue, Md.: 2 mollusks from Florida (170291)

WALLACE, Hon. HENRY A., Washington, D. C.: 2 painted Neolithic jars presented to him by Gen. Ku Chung-lun, Chairman of the Kansu Provincial Government, Lanchow, China (168114).

WALLACE, MARY BRUCE, Washington, D. C.: Engraving of George Washington, in mezzotint combined with mixed engraving methods, by A. H. Ritchie after the painting by P. F. Rothermel (169234).

WAR DEPARTMENT, Washington, D. C.: (Through Bell Aircraft Corporation Airplane XP 59A (Bell Airacomet), first jet-propelled airplane built and flown in the United States, designed and constructed by the Bell Aircraft Corporation in 1942 for the Army Air Forces (170106).

Army Air Forces, Dayton, Ohio: 1 type C–1 emergency sustenance vest (168687), loan).

Army Air Forces Tactical Center, Orlando, Fla.: (Through Lt. Earl S. Herald) 26 mosquitoes from Florida (170323).

Army Medical Museum: (Through Maj. H. A. Davis) 4 snakes and 4 lizards from New Guinea and India (167858), 3 snakes and 1 frog from New Guinea, collected by Chaplain Anselm W. Keefe (168071) 168751), 16 snakes and 3 lizards and 1 frog collected in New Guinea by Squadron Surgeon, 65th Service Squadron Unit 1 (168752), 1 seasnake, 4 fishes, and 2 insects from Capt. Raymond Roberts, 201st Medical Composite Unit (169084), 19 rats, 1 bandicoot, 1 shrew, 5 nematode worms, and a small collection of insects from New Guinea (168253, 168847, 169170, 169258, 169354, 169445, 169528, 169602), skin and skull of a bandicoot (169071), 3 bats in alcohol (169957), forwarded by Capt. Carl O. Mohr); 41 leeches forwarded by the 249th General Hospital (168985); bronze bust on pedestal of Dr. Horace Wells (169020); 4 bats, 2 rats, 1 gecko, collected by Pfc. Percy A. Chandler at New Delhi, India,

summer of 1944 and March–April 1945 (169227, 170113, 170159); 5 giant rats collected by Capt. Milton H. Buehler (169240); 42 rodents, 1 bandicoot, 16 bats forwarded by 19th Medical Service Detachment General Laboratory (169605, 170127); 2 crabs and 1 octopus (169680); 12 rats from Morotai Island (169704); 9 rats and 2 bats from the Philippine Islands (169801, 170261); 8 rats forwarded by 31st Malaria Survey Detachment (170355); 4 bats collected by T/5 A. J. Nicholson (170448).

Army Service Forces Training Center, New Orleans, La.: (Through Capt. Joseph E. Schenthal) 22 mosquitoes, representing 7 species, from Louisiana (167727).

Fourth Service Command Medical Laboratory, Fort McPherson, Ga.: (Through Maj. Stanley J. Carpenter) 91 mosquitoes of 15 species of southwestern United States (168-197); (through Lt. Louis Roth) 67 mosquitoes (168538).

Malaria Laboratory and Control Unit, A. P. O., Miami, Fla.: 19 mosquitoes from Trinidad (168391).

Office of the Surgeon General, (Through Maj. J. C. Swartzwelder) 300 mollusks from Lake Tali-Fu, Yunnan, China (169726).

WARD'S NATURAL SCIENCE ESTABLISHMENT, Rochester, N. Y.: An andradite garnet from Graham County, Ariz, a cobaltite from Salmon, Idaho, and a uraninite from Cornwall, England (169365, exchange); a specimen each of keramohalite xonotlite (168004, exchange).

WASHINGTON, UNIVERSITY OF, Seattle, Wash.: (Through Prof. Trevor Kincaid) Collection of amphipods from Puget Sound and Alaska, approximately 97 alcoholic specimens and 175 slides (168547); (through Prof. C. Leo Hitchcock) 9 plants from Idaho (169325, exchange).

WATSON, T. J. (See under International Business Machines Corporation.)

WEATHERBY, C. A. (See under Harvard University, Gray Herbarium.)

WEBB, Maj. J. E., A. P. O., San Francisco, Calif.: 1 spider and 3 centipedes (169126).

WEBBER, Dr. J. M., Riverside, Calif.: 2 specimens of yucca (169902).

WEBER, Prof. NEAL A. (See under University of North Dakota.)

WESTMAN, BURTON J., Etna, Calif.: (Through Dr. J. B. Reeside, Jr.) 22 Silurian invertebrate fossils from Siskiyou County, Calif. (169145).

WEST VIRGINIA UNIVERSITY, Morgantown, W. Va.: 34 plants from West Virginia (169526); (through Prof. Earl L. Core) 162 plants from West Virginia (169817, exchange).

WETMORE, Dr. A., Washington, D. C.: 4 skeletons of birds, Colombia snipe (167924); 7 birds from Shenandoah National Park (167925); 1 nestling house sparrow (167926); 27 bird skins (168395, 169035, 169758, 170379); 1 bat from Takoma, Md. (169612); 4 specimens of Philippine postage stamps on cover (169854). (See also under Charles L. Sibley and Smithsonian Institution, U. S. National Museum.)

WETZEL, Mrs. FLORA H., Washington, D. C.: Engraving of the Lord's Prayer, by H. Heath with pencil note from Everhard Snyder, of the period about 1862–64 (168485).

WHITE, Mrs. ELEANOR C., Washington, D. C.: 130 plants, mostly mosses, from eastern United States (168076).

WHITE & WYCKOFF MANUFACTURING Co., Holyoke, Mass: (Through A. H. Sampson) Art calendar for 1945 (168957).

WHITEHEAD & HOAG Co., Newark, N. J.: Silver token commemorating the airplane flight of Amelia Earhart across the Atlantic Ocean in 1928 (170581).

WHITTEN, HORACE L., Chauvin, La.: 26+ marine invertebrates, 4 crabs, 173 echinoderms, mollusks, 2 frogs, 1 insect, and 60 fishes (169078, 169460, exchange); 4 fishes from south of Timbalier Island (169742, exchange); 10 fishes from near Wine Island, La. (169972, 170107, exchange).

WILKE, Ensign C. FORD, Brooklyn, N.Y.: 2 skins of European linnet (169282).

WILKE, Ensign HOWARD T., F. P. O., San Francisco, Calif.: 1 leaf-insect (169188).

WILLARD, Dr. BRADFORD, Bethlehem, Pa.: Fossil starfish (type) from the Upper Ordovician (Martinsburg formation), Cumberland County, Pa. (168048).

WILLCOX, Capt. FRED P., Arlington, Va.: 41 pictorial photographs for special exhibition during July (167951, loan); 4 pictorial photographs (168908).

WILLETT, GEORGE, Los Angeles, Calif.: 3 paratypes of mollusks (169324).

WILLIAMS, Dr. FRANCIS X., Honolulu, Hawaii: 6 flies (170047). (See also under Lt. Sherwin F. Wood.)

WILLIAMS, Dr. J. STEWART, Logan Utah: 3 cotypes of a Mississippian blastoid from Utah (169715).

WILSON, Lt. CHARLES S. Takoma Park, Md.: 1 vial of copepods from Guadalcanal (170199).

WILSON, IVAN F. (See under Pierre Mahieux.)

WILSON, L. WAYNE, Moorefield, W. Va.: 3 amphipods and 6 mollusks (166985); 20 parasitic worms (169167) 1 vial of parasites collected from a turtle (170061).

WIPRUD, THEODORE. (See under Medical Society of District of Columbia.)

WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY, Madison, Wis.: 3 copepods, approximately 50 cladocerans, and 20 ostracods (168812).

WITCHEN, ELSIE, Washington, D. C.: Infant girl doll of period 1881 (169619).

WOLF, HARRY J., Washington, D. C.: 1 specimen of sphalerite from Big Four mine, Kremmling, Colo. (168802).

WOOD, T/5 CARROLL E., Jr., Fort George Meade, Md.: 6 butterflies from Virginia, representing 4 species (168544).

WOOD, Lt. SHERWIN F., F. P. O., San Francisco, Calif.: (Through Francis X. Williams) 437 mosquito larvae (169114); 304 mosquitoes and other flies from Saipan and Tinian, Marianas Islands (169417).

WORK PROJECTS ADMINISTRATION, Washington, D. C.: (Through Nebraska State Historical Society) skeletal remains from sites Nh 4 (Whitten site, Nemaha County) and Do 4b (Havlicek farm, Douglas County) in Nebraska, collected through joint operations of the Society and W. P. A. (168168).

WYGODZINSKY, Dr. PETR. (See under Instituto de Experimental Agricola.)

WYOMING, UNIVERSITY OF, Laramie, Wyo.: 194 plants from Wyoming, Texas, and Mexico (169529, exchange).

YALE UNIVERSITY, *Bingham Oceanographic Laboratory*, New Haven, Conn.: (Through Dr. Daniel Merriman) 1 fish taken by the *Pawnee* at Cat Island in the Bahamas, 1927 (169429, exchange).

School of Forestry, New Haven, Conn.: Small sample of ciruelillo wood from Cuba (169488, exchange).

YOLLES, Lt. STANLEY F., A. P. O., Miami, Fla.: 25 mollusks from Cayenne, French Guiana (168674); 27 specimens of fresh-water mollusks and 47 specimens of fishes from French Guiana and the French Antilles (169192).

YOUNG, EDWARD L., F. P. O., San Francisco, Calif.: 13 mosses from the Aleutian Islands (169770).

YOUNG, JAMES B., Louisville, Ky.: 1 white-eyed vireo (167973, exchange).

ZELIFF, Prof. C. COURSON, State College, Pa.: 1 slide of parasitic worm (169289).

ZETEK, JAMES, Balboa, Canal Zone.: (Through Dr. J. P. E. Morrison) 385 fresh-water shells from Panama (168825); 178 isopods and about 200 shipworms, including the type of a new species, from Canal Zone (167866); 14 specimens of *Peripatus* collected on Barro Colorado Island from leaf mold (170062).

ZIMMER, Dr. JOHN T. (See under American Museum of Natural History.)

ZODAK, PETER, Peekskill, N. Y.: A specimen each of stilbite, basalt, and heulandite with amethystine quartz and 2 specimens of altered cacholong from the Consolidated Quarry, Great Notch, N. J. (168024).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1944–45

BULLETINS

Bulletin 185, part 3. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Compiled by Richard E. Blackwelder. 8vo, pp. i–iv, 343–550. May 21, 1945.

PAPERS PUBLISHED IN SEPARATE FORM

FROM VOLUME 29, CONTRIBUTIONS FROM THE UNITED STATES NATIONAL HERBARIUM

Part 2. Mexican phanerogams described by M. E. Jones. By C. V. Morton. Pp. 87–116. Asteraceae described from Mexico and the Southwestern United States by M. E. Jones, 1908–1935. By S. F. Blake. Pp. 117–137. May 21, 1945.

FROM VOLUME 94 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i–vi, 583–598. December 1, 1944.

No. 3177. Parasitic copepods in the United States National Museum. By Charles Branch Wilson. Pp. 529–582, pls. 20–34. July 10, 1944.

FROM VOLUME 95 OF THE PROCEEDINGS

No. 3179. A collection of birds from northern Guanacaste, Costa Rica. By Alexander Wetmore. Pp. 25–80, pls. 3–6. July 7, 1944.

No. 3180. Studies in Neotropical Mallophaga (III) [Tinamidae No. 2]. By M. A. Carriker, Jr. Pp. 81–233, figs. 1–29. October 10, 1944.

No. 3181. The fishes of the family Characinidae from Venezuela, with descriptions of seventeen new forms. By Leonard P. Schultz. Pp. 235–367, figs. 30–56. September 6, 1944.

No. 3182. New genera and species of oriental and Australian plant bugs in the United States National Museum. By Tsai-Yu Hsiao. Pp. 369–396, fig. 57. August 5, 1944.

No. 3183. New species of buprestid beetles from Trinidad. By W. S. Fisher. Pp. 397–409. July 22, 1944.

No. 3184. The Fulgoroidea, or lanternflies, of Trinidad and adjacent parts of South America. By R. G. Fennah. Pp. 411–520, pls. 7–17. May 24, 1945.

No. 3185. Summary of the collections of amphibians made in Mexico under the Walter Rathbone Bacon traveling scholarship. By Edward H. Taylor and Hobart M. Smith. Pp. 521–613, figs. 58–61, pls. 18–32. January 30, 1945.

FROM VOLUME 96 OF THE PROCEEDINGS

No. 3186. Review of the spider monkeys. By Remington Kellogg and E. A. Goldman. Pp. 1–45, figs. 1–2. November 2, 1944.

No. 3187. A revision of the American clingfishes, family Gobiesocidae, with descriptions of new genera and forms. By Leonard P. Schultz. Pp. 47–77, pl. 1. December 30, 1944.

No. 3188. New beetles of the family Eucnemididae from Central America and the West Indies. By W. S. Fisher. Pp. 79–93. May 8, 1945.

No. 3189. New lanternflies (Fulgoroidea) from South America. By R. G. Fennah. Pp. 95–104, pls. 2–3. May 9, 1945.

No. 3190. The genus *Fundella* Zeller: A contribution toward a revision of the American pyralidoid moths of the family Phycitidae. By Carl Heinrich. Pp. 105–114, pls. 4–6. May 18, 1945.

No. 3191. A new genus and two new species of percoid fishes from New Guinea, family Centropomidae. By Leonard P. Schultz. Pp. 115–121, figs. 3–4. March 6, 1945.

No. 3192. Three new sciaenid fishes of the genus *Ophioscion* from the Atlantic coasts of Central and South America. By Leonard P. Schultz. Pp. 123–137, figs. 5–8. April 25, 1945.

No. 3193. The ichneumon-flies of the genus *Cryptanura* Brullé, mainly Tropical American. By R. A. Cushman. Pp. 139–176. May 23, 1945.

No. 3194. Neotropical lanternflies of the genus *Phrictus* in the United States National Museum, with descriptions of four new species. By John S. Caldwell. Pp. 177–184, pls. 7–10. May 16, 1945.

REPORT OF

THE UNITED STATES NATIONAL MUSEUM

1946

SMITHSONIAN INSTITUTION
WASHINGTON
D. C.

SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1946

Cx. 2.63.

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REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1946

By ALEXANDER WETMORE

Secretary of the Smithsonian Institution, Director of the United States National Museum

OPERATIONS FOR THE YEAR

APPROPRIATIONS

FUNDS for the support of the National Museum for the fiscal year 1946 were provided by the appropriation "Salaries and expenses, Smithsonian Institution," in the Independent Offices Appropriation Act approved May 3, 1945, and in two supplemental appropriations. The expenditures are summarized as follows:

Project "National Museum"	$411,861
Project "Maintenance and operation"	536,192
Project "Printing and binding"	43,000
Total available for year	991,053

The project "National Museum" provides for the increase, study, exhibition, and preservation of the national collections in natural history, anthropology, engineering and industries, and history. The project "Maintenance and operation" provides for maintenance, repair, operating, and guarding of all the buildings of the Smithsonian group. The project "Printing and binding" covers the cost of publications of the National Museum and necessary binding of books, periodicals, and pamphlets in the Museum library. There was no provision for change in personnel available for Museum activities. Under the project "National Museum" hours of duty were reduced from 48 to 40 per week on September 10, 1945. Overtime hours were maintained during the year for the project "Maintenance and operation."

There has been a steady acceleration of the Museum's activities through the year as operations normal to peacetime one by one have been resumed or augmented in the change from the period of war. Return of the younger staff members from service with the armed forces has accelerated this change. And for the first time in several

years it has been possible to consider appointees for numerous scientific positions that have been open. These matters were well in hand at the close of the period.

The space situation has been discussed annually in these reports and has become more and more acute. The Natural History Building requires expansion, and new structures are necessary to replace the old Museum building on the south side of the Mall. These should include a building for engineering and industries, with appropriate space for aviation, and one for history.

These needs have been under careful consideration and have been included in considerations of the Federal Works Agency. Authorization for them is included in H. R. 4276 under title II, section 202. The Secretary and C. W. Mitmæn, head curator of the department of engineering and industries, appeared before the Committee on Public Buildings and Grounds, House of Representatives, on October 18 and presented the Museum building needs in detail.

The proposals, therefore, are included for consideration in the next public works program, which at the moment, however, is in abeyance due to shortages in materials.

Though return of workers from the armed forces has been of major assistance, the total personnel for the Museum is considerably below the needs of the organization. The great and irreplaceable values found in our collections fully warrant that these needs be pressed before committees concerned with our finances. The needs are found in all levels of employment from the professional groups down.

COLLECTIONS

There has been a steady flow of new material to the Museum's collections during the year; in fact, there was a 60-percent increase in number of individual specimens received over 1945. This increase was felt in all departments except the department of engineering and industries, where a decrease in number of specimens received was attributed chiefly to the unsettled conditions in industry following the end of the war. Many of the accessions continued to come from members or former members of the armed services working in regions hitherto not well represented in the Museum's collections. Many also, as usual, were transferred from other governmental agencies.

New material came in 1,594 separate lots, with a total of 379,306 specimens, distributed among the 5 departments as follows: Anthropology, 9,026; biology, 320,037; geology, 45,163; engineering and industries, 1,480; history, 3,600.

For examination and report 1,193 lots of specimens were received, covering all the fields embraced in our laboratories, an increase of 71 lots over last year. Some of this material is returned to the senders,

and some that is especially desirable is retained for the Museum's collections.

Gifts of duplicates to schools, museums, and other institutions numbered 3,090 specimens. Exchange of duplicate material with other collections amounted to 21,891 specimens, and 1,028 specimens were transferred to other governmental agencies. Loans for scientific study to investigators outside of Washington totaled 41,526 specimens. The summary of the collections given below has been adjusted to reflect additions and eliminations from the various series and represents the material cataloged at the close of the fiscal year.

Anthropology	728,318
Biology	14,661,177
Geology	2,751,696
Engineering and industries	144,050
History	534,765
Total	18,820,006

EXPLORATIONS AND FIELD WORK

Although field explorations during the year were not extensive, they represented a return toward the regular schedule of such activities in times of peace.

Dr. E. A. Chapin, curator of insects, in connection with the State Department's program for the promotion of cultural relations with scientists in other American countries, left on April 25 for Colombia. During May he was at the Instituto de Ciencias Naturales of the National University in Bogotá, where he was occupied in consultations with government entomologists in connection with cooperative investigations, particularly on certain groups of Coleoptera of economic importance. There was opportunity at the same time for field studies in a variety of climatic zones ranging from Villavicencio in the tropical lowlands at the eastern base of the Andes to the high mountain passes above Bogotá. In June Dr. Chapin continued to Medellín, where he was occupied for several days with Prof. F. Luis Gallego in examining insect collections at the Facultad de Agronomía. This was followed by similar work in Cali and Palmyra with Belisario Losado, and at Popayán in the Universidad del Cauca. He returned to Washington on June 30.

Dr. Robert R. Miller, associate curator, division of fishes, was assigned to a survey of the fish and game resources of Guatemala, a cooperative project of the Fish and Wildlife Service of the Department of Interior and the Guatemalan Government, with the participation of the Smithsonian Institution. Investigations began in March and continued until the end of May, Dr. Miller being occupied mainly with studies of the fresh-water fishes of the plateau area. Collections

were made principally above 3,000 feet covering many lakes and streams. In addition there was opportunity for briefer studies along the middle Motagua River and in Lake Ysabal. The work in the main was in the nature of reconnaissance, with expectation of continuing in greater detail another season. The present collections, now under study, are yielding much data of interest.

In connection with the atom-bomb tests at Bikini, Dr. Leonard P. Schultz, curator of fishes, and Dr. J. P. E. Morrison, assistant curator, division of mollusks, left in February to begin a detailed survey of the fauna of the atoll. It was expected that a careful check would be made of conditions following the bomb explosions. The studies of Dr. Schultz are concerned with fishes in the lagoon and along the reefs to obtain data on the kinds present and on their relative abundance. Dr. Morrison is occupied with mollusks and other marine invertebrates on the reefs and also with detailed collections of the land animals present, including the birds. There has been opportunity also for comparative studies at several other atolls in the Marshall Islands. The extensive series of specimens already obtained will serve as an index to the forms found and will be especially important also as the first collections in the Museum from this region. This work was still under way at the close of the year and will be reported in more detail next year.

At the beginning of March Dr. Alexander Wetmore, Secretary of the Smithsonian Institution, accompanied by W. M. Perrygo, scientific aide, went to Panama, where they were occupied briefly in checking on the fauna on San José Island in the Perlas group, where the Smithsonian made extended studies in 1944. Following this they examined the Canal Zone Biological Area on Barro Colorado Island in Gatun Lake, an agency for which Dr. Wetmore serves as executive officer. On March 14, through the assistance of Maj. Gen. H. R. Harmon, commanding general of the Sixth Air Force, they proceeded by plane to the auxiliary airfield at Jaqué in eastern Darién. Here they remained until April 16 making detailed collections and studies of the bird life of the coastal area. Ranges of broken hills and the lowlands along the Río Jaqué were a fertile field, so that the 640 specimens obtained during 30 days of field work include representatives of 170 species. These supplement excellently earlier collections under Smithsonian auspices in eastern Darién. The party returned to Washington on April 21.

M. A. Carriker, Jr., traveling under the W. L. Abbott fund of the Smithsonian Institution, this season covered the high páramos of the Sierra Nevada de Santa Marta, Colombia, entering the area in January through San José and San Sebastián de Rábago. Traveling in part with pack oxen, Mr. Carriker worked first at Chinchicuá

where there was some forest in addition to the open slopes. At the beginning of February he camped at Simínchucuá at a higher elevation where morning temperatures were frequently at freezing, with ice not uncommon. The next camp, called Mamancanaca, was at 10,500 feet in a region of glaciated valleys and old moraines. Four lakes at successively higher levels lay below the snow fields at 15,350 feet. Birds in the main were found below 12,000 feet. A further camp was located early in March at 10,000 feet on the headwaters of the Río Guatipurí, and in April still another farther down the same river at the little Indian hamlet of Chendúcua. The expedition was highly successful, obtaining fine series of the high-mountain birds, including many not previously represented in the Museum and several that are new to science. Other collections made at lower elevations give representation of the better-known Santa Marta races, furnishing a highly desirable addition to our series from northern Colombia.

In the department of geology Dr. G. A. Cooper, curator of invertebrate paleontology and paleobotany, accompanied by Dr. J. Brookes Knight, research associate, left on June 12 for Austin, Tex., and from there proceeded by auto to the Glass Mountains in west Texas. At that point the party was joined by Dr. R. C. Moore, of the University of Kansas. The three cooperated in collecting blocks of Permian limestone containing fossils in various parts of the mountains. Dr. Preston E. Cloud joined the party on July 19 and served as leader for further work in the Central Hill country of Texas to collect Mississippian, Devonian, and Pennsylvanian fossils. After a week in this region the party divided, Dr. Moore to return to Kansas and Dr. Cooper and Dr. Knight to join Mrs. J. H. Renfro and Millicent Renfro for 4 days of collecting in the incomparable Pennsylvanian fossil deposits of Jack County, Tex. Work in the field ended on August 5 after more than 5 tons of blocks of silicified material, to be cleaned by etching with acid, and about 5,000 specimens of invertebrate fossils from central Texas had been obtained.

On October 1, Dr. Cooper, accompanied by Associate Curator Byron N. Cooper and Y. Wang, a member of the Geological Survey of China working temporarily at the National Museum, left for the southern Appalachians and the Central Basin of Tennessee. Dr. C. O. Dunbar and Percy Morris, of Yale University, joined the party at Woodstock, Va. After several days in southwestern Virginia they continued west to Murfreesboro, Tenn., and then to east Tennessee for work near Knoxville. From this vantage point forays were made into various parts of the Ordovician belts of east Tennessee for collecting and study. On October 16 Wang and the two Coopers continued south to Pratts Ferry about 35 miles south of Birmingham, Ala., and from

here worked northeast along the Ordovician belts through northeastern Georgia and on into eastern Tennessee and Virginia. The party returned to Washington on November 14. This trip proved most profitable in checking on Ordovician stratigraphy. About 5,000 specimens, including considerable new material, were collected.

On February 7, 1946, Dr. Cooper again left Washington for Austin, Tex., where he joined Dr. Preston E. Cloud, of the Geological Survey, for further studies and collecting in the Central Hill country. The two visited many localities in the neighborhood of Burnett, San Saba, Mason, and Brady. Many fine Mississippian fossils were collected and Pennsylvanian fossils were also obtained in several places. Dr. Cooper returned to Washington on February 24 with some 5,000 specimens that form a fine representation of these beds.

The Museum's part of the three geological expeditions described above was financed from the income of the Walcott fund.

Dr. C. L. Gazin, curator of vertebrate paleontology, with Franklin Pearce, scientific aide, as assistant, left Washington on May 23, in a truck available through the cooperation of the United States Army, on an expedition into the western States, to secure additional fossil mammal remains from Paleocene deposits and to make a further collection of fossil lizards from the Cretaceous in central Utah, as well as to continue collecting in the Middle Eocene Bridger beds of southwestern Wyoming. These formations have been untouched by collecting parties during the war years, and it is expected that weathering will have exposed many additional fossils. The expedition will continue into the next fiscal year, when several fossil localities in the Wind River Basin reported by geological parties of the United States Geological Survey will be investigated. The cooperation of the Army in the loan of the truck is much appreciated, since it proved to be a large factor in making the expedition possible. This is another project under the Walcott fund of the Smithsonian Institution.

Dr. W. F. Foshag, curator of mineralogy, spent the first quarter of the year in Mexico, concluding field work there, and returned to Washington on October 8. This work on the mineral resources of that country and on Parícutin Volcano was a joint project of the National Museum and the United States Geological Survey in collaboration with the Committee for the Study of Mineral Resources of Mexico. Field studies were completed on the fluorspar deposits of the Tasco District, State of Guerrero, the mercury-copper deposits of Las Fraguas, and the copper deposits of Oropeo, State of Michoacán, with the assistance of Mexican geologists of the committee. Field work in geochemical studies at Parícutin Volcano was continued.

On request from General MacArthur, Dr. Foshag and E. P. Henderson, associate curator in mineralogy, on May 25 went to Tokyo

to undertake classification of the gem stones under the Army's jurisdiction.

VISITORS

Now that normal travel conditions have returned, the number of visitors to the Museum buildings is gradually rising to its prewar level. An increase of 384,877 visitors was recorded this year over last, the totals being 2,115,593 for 1946 and 1,730,716 for 1945. June 1946 was the month of largest attendance, with 246,012 visitors; August 1945 the second largest, with 216,801. Records for the four buildings show the following numbers of visitors: Smithsonian Building, 430,760; Arts and Industries Building, 852,080; Natural History Building, 606,310; Aircraft Building, 226,443. A complete summary of attendance is given in table 1:

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1946*

Year and month	Smithsonian Building	Museum buildings			
		Arts and Industries Building	Natural History Building	Aircraft Building	Total
1945					
July	35, 232	68, 026	52, 822	18, 441	174, 521
August	46, 498	87, 009	59, 371	23, 923	216, 801
September	39, 661	76, 732	53, 941	22, 189	192, 523
October	36, 617	72, 112	51, 890	17, 608	178, 227
November	32, 522	65, 979	46, 189	17, 336	162, 026
December	18, 672	32, 954	27, 988	10, 383	89, 997
1946					
January	23, 205	42, 842	34, 634	12, 586	113, 267
February	29, 584	54, 402	41, 027	15, 286	140, 299
March	40, 322	75, 884	49, 159	21, 443	186, 808
April	44, 395	87, 999	61, 835	20, 511	214, 740
May	37, 038	85, 175	60, 933	17, 226	200, 372
June	47, 014	102, 966	66, 521	29, 511	246, 012
Total	430, 760	852, 080	[1] 606, 310	226, 443	2, 115, 593

[1] Not including 12,766 persons attending meetings after 4:30 p. m.

LIBRARY

The gradual transition from wartime to peacetime conditions, still going on, made no marked difference in the kind or amount of work done in the Museum library during the past year. There was naturally less reference use of the library by war agencies, but returning members of the Museum's own scientific staff, together with members of the services still detailed to work on special projects in the Museum, kept the library staff as busy with reference and bibliographical work as during the war years, while the number of books and periodicals circulated differed by only a few volumes from last year.

The most immediately interesting accessions of the year were the foreign journals coming to us in ever-increasing numbers as shipping conditions improved and as interrupted exchange relations with European museums and scientific institutions began to be reestablished. Many of these were token sendings of a few publications only, but there were also some larger accumulations of European publications issued during the war.

Members of the scientific staff and other friends of the Museum continued to make generous gifts to the library. Especially notable among these gifts is the late Charles W. Gilmore's private library of books and pamphlets on vertebrate paleontology which Mrs. Gilmore so graciously presented to the division of vertebrate paleontology. The collection, which has not yet been cataloged or fully counted, consists of more than 600 books and pamphlets, in addition to 94 pamphlet boxes full of reprints and separates. These latter constitute an especially useful addition to the sectional library of the division.

By transfer from the National Academy of Sciences to the Smithsonian Institution, a considerable number of important publications needed to complete gaps in the Museum library's files were received.

Of other publications added during the year, 889 books and 140 periodical subscriptions were purchased, while 371 volumes and 4,168 parts of serial publications were received in exchange.

Most of the publications purchased for the library are wanted either for immediate use or because they contain information likely to be needed frequently for reference. Their cataloging consequently takes routine precedence over that of other material and is generally well kept up. Such was the case during the past year, although the need of an additional subprofessional assistant continued to be acutely apparent in the elapsed time between the completion of the professional cataloging of the books and the making and filing in the catalog of the cards constituting a complete record of them. Most of the other current publications were also cataloged, but it was not possible to begin the cataloging of the special collections received last year or of the Gilmore collection. There are always more incoming publications than the present staff of catalogers can handle immediately upon receipt.

The checking of sets of serial publications for missing parts, the making of "want" cards, and the correction of old records proceeded satisfactorily together with the preparation of complete volumes for the bindery. A smaller allotment of funds for binding this year and the rise in binding prices prevented the sending of many of the current volumes that were ready. The services of a temporary appointee skilled in book repair again made it possible to repair and treat many of our fine old books at comparatively little expense. It is fortunate

for the library that this temporary position is now to be made permanent.

In the Arts and Industries Building the work of making a detailed inventory was continued as time permitted, and 44 shelves were checked with attendant revision of catalog and shelf-list cards.

The most urgent problem of the Museum library—the matter of shelf-room—continues to remain unsolved. The saturation point of comfortably filled shelves was reached long ago, and the supersaturation of overcrowding and double shelving has arrived at such a point that a mounting overflow of books and periodicals that cannot be shelved at all is inevitable unless some relief can soon be provided.

The second and equally serious of the larger unsolved problems is the cataloging "backlog." By a rough estimate there are 177,000 volumes that are so incompletely or inaccurately represented in the catalog that a prolonged search and the use of a lively imagination are not infrequently necessary to find out whether the library has a copy of a requested book, or one covering information on a given subject. As stated in last year's report, this cataloging "backlog" is far too large and complex to be eliminated by the regular staff of catalogers within any predictable future time. It should be undertaken as a special project with a special temporary staff of catalogers engaged to complete it within a specified time.

Summarized Statistics

Accessions of cataloged volumes	2,772
Volumes, pamphlets, and maps cataloged or recataloged	3,698
Periodical parts entered	6,303
New exchanges arranged	142
Volumes sent to the bindery	770
Volumes repaired in the Museum	1,010
Circulation of books and periodicals, main library	8,071
Publications sent to sectional libraries for intradivisional circulation and filing	4,538

PUBLICATIONS AND PRINTING

The sum of $43,000 was allotted the National Museum for its publication requirements during the year 1945–46, the same as for the previous year. Of this, $34,000 was used for printing Bulletins, Proceedings, and Annual Reports; $5,000 for binding; and $4,000 for the salary of the Museum printer. Thirteen publications were issued—2 Annual Reports, 6 Bulletins, and 5 Proceedings papers. A list of these is given on page 113. Volumes bound totaled 770.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 25,185, while in addition 7,702 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

The editor, Paul H. Oehser, continued to serve as chairman of the Efficiency Rating Committee of the Smithsonian Institution and devoted considerable time to the efficiency-rating program. He was elected also a member of the American Documentation Institute, representing the Smithsonian. On January 18, 1946, Mr. Oehser was made assistant chief of the Editorial Division, Smithsonian Institution, but will continue as editor of National Museum publications. In connection with the observance of the Smithsonian Institution Centennial, he guest-edited the August 9, 1946, issue of the magazine *Science*, which was devoted to historical accounts of the Institution's contributions to research during the past hundred years.

Indexing.—Miss Gladys O. Visel, editorial clerk; Mrs. Marguerite W. Poole, information clerk; and Mrs. Phyllis W. Prescott, clerk-stenographer, continued with the indexing work that has gradually devolved upon the editorial office. Mrs. Poole, as time permitted, continued work on the general index of Museum publications begun several years ago. She also indexed part 10 of Bulletin 50, Birds of North and Middle America, in press at the end of the year. Mrs. Prescott prepared the index for Proceedings volume 95, and this is soon to be sent to the printer. During the last half of the year work was begun in the Editorial Division on the preparation of a complete list of Museum publications, with author-title index, much of the work of this compilation devolving upon Miss Visel. It is planned to publish this list as a Museum bulletin as a part of the celebration of the Smithsonian Institution Centenary.

Museum print shop.—As in previous years, Frank W. Bright was detailed from the Government Printing Office to print Museum and herbarium labels and special forms at the Museum print shop, which is a branch of the Government Printing Office located in the southwest corner of the Arts and Industries Building. Mr. Bright completed 131 of the 154 requisitions submitted for printing during the year; 11 that were submitted during the previous fiscal year were likewise finished, making a total of 142 for the year. Of the uncompleted requisitions, 16 represent large exhibition labels or specimen labels, involving much hand-setting of type or long press runs. The remaining 7 requisitions were submitted too late in the year for completion before June 30. Though reasonably up to date, the work of the print shop is handicapped by lack of sufficient help for maximum production.

PHOTOGRAPHIC LABORATORY

Under a cooperative arrangement the photographic laboratory does work for the Smithsonian proper, the Bureau of American Ethnology, the National Collection of Fine Arts, and the National Zoological Park, as well as for the National Museum. During the year the fol-

lowing materials were processed by the laboratory under this arrangement: 2,438 negatives made; 10,432 prints made; 1,371 enlargements made; 259 slides made; 101 slides mounted; 59 kodachromes made; 22 rolls of film developed; 6 film packs developed; 49 paper negatives developed; 15 cloth mounts made; 31 negatives opaked; 11 color prints made; 98 negatives retouched; 133 dry-mounts made; and 9 cut films developed. In addition considerable time was spent by the staff in layout work preparatory to photographing. Forty-eight microfilms and 133 photostats were furnished by the Army Medical Museum in exchange for 14 negatives and 22 prints. In spite of the end of the war and the consequent lessening of photographic work required for our war-effort activities, the work requisitioned by the various branches of the Institution still taxes the resources of the laboratory, both in equipment and manpower. Much modern equipment is badly needed, although photographic supplies are now being delivered with more dispatch than during the war years in spite of continuing shortages.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—Routine repairs engaged most of the time of the skilled labor force. Several important pieces of work were undertaken on the exterior of the Smithsonian Building: The old metal finial on top of the west north tower was removed and a new copper finial installed; 42 storm sashes were made and permanently attached over the clear story windows in the connecting hall between the main hall and the chapel, to prevent water damage to the interior walls; emergency repairs were made to the eight sections of wooden louvers on the flag tower to prevent injury to the public from falling boards. New copper louvers, measuring 17½ inches wide by 29 feet 11 inches high, were made in the sheet metal shop during the winter for installation during the early part of the next fiscal year.

Heat, light, and power.—Electric current used during the year amounted to 1,513,769 kilowatt-hours. This figure represents 30,370 kilowatt-hours decrease from 1945, due to the "brown-out" proclaimed during the soft-coal strike, when current consumption was held to the absolute minimum.

Steam consumption was held to minimum requirements during the year, and as the result of this economizing and the fact that temperatures during the heating season were slightly higher than in 1945, the steam consumption was 3,722,088 pounds less than 1945. Total steam consumption for the year was 53,399,800 pounds.

Ice production.—The Museum ice plant produced 173.9 tons of ice at a cost of $1.74 per ton, exclusive of labor. The plant was closed down 12 days during April 1946 for overhauling. A supply of ice to last during this period was stored prior to the closing down of the plant, and so it was not necessary to purchase ice.

Fire protection.—Of the $1,312.95 spent for fire protection, $1,007.60 was used for the purchase of new equipment. The principal items purchased were 13 carbon dioxide extinguishers and 1,400 feet of 1½-inch linen hose, complete with couplings, nozzles, and hose racks for replacement of existing hose in the Smithsonian Building. Inspections of apparatus were made each month, and soda and acid extinguishers were discharged and recharged.

Furniture and fixtures.—Furniture acquired during the year consisted of 23 exhibition cases and bases and 328 items of storage, office, laboratory, and other furniture. On hand on June 30, 1946, were 3,558 exhibition cases and 20,742 pieces of storage, office, laboratory, and other furniture; 121,137 drawers, boxes, and wing frames.

MEETINGS AND SPECIAL EXHIBITS

The Museum continued to make available the auditorium and lecture room of the Natural History Building to educational, scientific, welfare, and governmental organizations and groups for meetings and lectures. During the past year 233 groups availed themselves of this opportunity.

The foyer and adjacent space in the Natural History Building customarily used for special exhibits were in constant use except during September 1945 when the exhibit spaces were redecorated. The 11 special exhibits were:

July 1 to August 31, 1945: Exhibition by the Boy Scouts of America of handicrafts of the various Cub Packs based on the activities during each of the months of the year.

October 1 to 31, 1945: Exhibition of oil portraits of 27 of the "Flying Tigers" of Chinese war fame in four alcoves. A formal opening of the exhibition was held on October 4.

October 7 to 31, 1945: Exhibition of Nicaraguan sculpture using wood, ceramic, and marble, by Genaro A. Liro, under the auspices of the Pan American Union.

November 1 to 30, 1945: Exhibition of oil and water-color paintings held under the auspices of the District of Columbia Federation of Women's Clubs.

December 1, 1945, to January 31, 1946: Exhibition of models of famous battleships and cruisers, held by the division of history.

January 1 to 31, 1946: Exhibition of oil portraits by Alfred Jonniaux, held under the auspices of the Belgian Embassy.

February 1 to 24, 1946: Exhibition of "A Century of the Greeting Card," showing the greeting cards of the past 100 years.

March 1 to 31, 1946: Exhibition of oil paintings and water colors by the American painter Charles P. Gruppe.

April 1 to 30, 1946: Exhibition of enlarged photographs and handicrafts, made by students of the School of Arts Crafts of Bangkok, Siam.

May 1 to 31, 1946: Exhibition of oil and water-color paintings and sculpture by members of the National League of Pen Women.

June 7, to 16, 1946: Exhibition of oil and water-color paintings in a scholastic calendar art competition sponsored by the Washington Post.

CHANGES IN ORGANIZATION AND STAFF

The end of the war, and the ensuing Order of the President directing the Civil Service Commission to resume operations under the civil service rules, brought an unusual number of personnel changes, especially during the transitional period from war service to probational appointments. During the year, several reemployed annuitants, who, with long experience and special qualifications, had during the manpower shortage of the war remained in active service, were retired.

In the department of anthropology, John C. Ewers was appointed associate curator in the division of ethnology on June 3, 1946. Dr. Marshall T. Newman resumed his duties of associate curator in the division of physical anthropology, on January 7, 1946, after his release from active military service. The vacancy caused by the transfer of Mrs. Jessie S. Shaw to the Bureau of American Ethnology was filled by the promotion of Miss Mary V. Day as clerk-stenographer in the division of ethnology on June 2, 1946.

Dr. William R. Maxon, curator, division of plants, retired on May 31, 1946, and was succeeded by Ellsworth P. Killip. On April 30, 1946, Dr. Paul Bartsch, curator, division of mollusks, retired. Other changes in the department of biology were the reappointment after a furlough to private industry, engaged in special work concerned with the war, of Dr. Richard E. Blackwelder, associate curator, division of insects, on November 13, 1945. The department lost by resignation the services of Mrs. Marie P. Fish, scientific aide in the division of fishes, and Mrs. Mildred S. Wilson, assistant curator, division of marine invertebrates, on May 15, 1946, and June 14, 1946, respectively.

The vacancy in the division of vertebrate paleontology caused by the death of Charles W. Gilmore, curator, was filled by the appointment of Dr. Charles L. Gazin on January 21, 1946, and Arlton C. Murray was advanced to scientific aide on March 11, 1946. An addition to the staff of the division of invertebrate paleontology and paleobotany was Dr. Alfred R. Loeblich, Jr., appointed associate curator on May 31, 1946.

Having been released from active military service, Frank A. Taylor, curator, division of engineering, returned to his duties in the Museum on March 4, 1946. The department of engineering and industries at the close of the fiscal year lost three employees by retirement, as follows: Dr. Frederick L. Lewton, curator, and Mrs. Elizabeth W. Rosson, assistant curator, division of crafts and industries; and Dr. Arthur J. Olmsted, associate curator, section of photography.

Four honorary appointments on the museum staff were made during the year: Dr. Paul Bartsch, associate, division of mollusks; Dr. William R. Maxon, associate in botany; Mrs. Mildred S. Wilson, collabo-

rator in copepod Crustacea; and Dr. J. Brookes Knight, research associate in paleontology.

Under the superintendent of buildings and labor, Walcutt C. Hamer was promoted to assistant mechanical superintendent (foreman of cabinet shop), the position made vacant by the transfer of Rafe A. Watkins to the Army Map Service, and James I. Simpson was assigned the duties of the assistant foreman of cabinet shop effective July 16, 1946. Following retirement on disability February 20, 1946, of William H. Chism, James C. Clarke was promoted to principal guard (lieutenant), and Edward Zuranski was assigned as principal guard (sergeant) on March 10, 1946. Other additions to the guard officer group were the promotions of Bascom F. Gordon to principal guard (lieutenant) and William H. Baird and Arnold F. Shortridge to principal guards (sergeants) on June 30, 1946.

During the year the following Museum employees returned to their positions after having completed military duty: Edward Zuranski, September 9, 1945, John L. Theunissen and George V. Worthington, October 7, 1945; Charles E. Stousland, November 5, 1945; Joseph Singleton, December 3, 1945; Dr. Charles L. Gazin, December 27, 1945; Clyde E. Bauman, January 2, 1946; Samuel T. Fetterman, January 6, 1946; Dr. Marshall T. Newman, January 7, 1946; Walter McCree, January 30, 1946; Joseph R. Burke, Jr., February 20, 1946; Frank A. Taylor, March 4, 1946; Oliver N. Armstead, March 6, 1946; Robert L. Bradshaw and John Carl Carter, April 1, 1946.

Sixteen persons were retired during the year, under the Civil Service Retirement Act, as follows: Through age, Dr. Paul Bartsch, curator, division of mollusks, on April 30, 1946, after 50 years of service; Dr. Frederick L. Lewton, curator, division of crafts of industries, on June 30, 1946, after 34 years 4 months; and Dr. Arthur J. Olmsted, associate curator, division of graphic arts, on June 30, 1946, after 26 years 1 month. By optional retirement, Dr. William R. Maxon, curator, division of plants, on May 31, 1946, after 46 years 5 months; Mrs. Elizabeth W. Rosson, assistant curator, division of crafts and industries, on June 30, 1946, after 33 years 3 months; Edgar J. Harrison, mechanic (painter), on August 31, 1945, after 13 years 5 months; Augustus G. Lindsay, guard, on March 31, 1946, after 20 years 6 months; Beverly J. Moore, guard, on June 30, 1946, after 3 years 9 months; Henry Hicks, laborer, on September 30, 1945, after 23 years 4 months; and Mrs. Mary W. Paige, charwoman, on May 31, 1946, after 12 years 3 months. Through disability retirement, William H. Chism, lieutenant of guard, on February 20, 1946, after 13 years 10 months of service; Nicola DiGennaro, guard, on July 14, 1945, after 20 years 10 months; Leo L. Lennartz, guard, on February 26, 1946, after 5 years 4 months; John W. Lockhart, guard, on October 15, 1945,

after 11 years 3 months; Bror O. Olson, guard, on May 31, 1946, after 18 years 1 month; and Mrs. Nellie Butler, laborer, on November 30, 1945, after 26 years 11 months.

Through death the Museum lost six employees from its active roll during the year: Charles W. Gilmore, curator of vertebrate paleontology, on September 27, 1945, after 41 years 10 months of service; Thomas J. Horne, preparator, on December 26, 1945, after 34 years 9 months; George Boylen, mechanic (electrician's helper), on November 28, 1945, after 3 years 9 months; Thomas C. Watts, laborer, on October 14, 1945, after 18 years 2 months; Roland S. Woodland, laborer, on October 1, 1945, after 11 years; and Mrs. Fannie H. Nedd, laborer, on January 29, 1946, after 12 years.

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Head Curator*)

THE outstanding event during the year in this department was the return of the anthropological specimens evacuated from Washington during the war years to the exhibition cases or the classified study collections. This operation emphasized the urgent need for additional space to house these irreplaceable specimens. Miniature scale models were prepared in the anthropological laboratory in collaboration with the division of ethnology for the department's program of modernizing this particular section of the exhibition hall. The making of accurate endocranial casts has enabled the division of physical anthropology to identify a large series of brains with the corresponding skulls. The records had been preserved with the brains when received at the close of the last century, but during the process of cleaning the skulls their identification marks became illegible. It has been determined that the ridges formed on the inside of the skull by the convolutions of an adult brain are almost as diagnostic as fingerprints.

As a result of the depleted staff during the war, as well as of restricted laboratory facilities, a considerable backlog of unclassified and uncataloged specimens has been accumulating. On the basis of approximately 65,000 specimens within the department awaiting these essential procedures, it is estimated that an additional 10 man-years will be required to accomplish this task.

During the year the head curator served on several committees dealing with the Museum work load, budgetary matters, and special exhibitions. As secretary of the Advisory Board of the National Park Service he attended the annual meeting in December 1945, and from May 6–8, 1946, participated in a conference of historians, archeologists, and museum people at Jamestown and Williamsburg, Va.

ACCESSIONS

The department received 69 accessions during the year with a total of 9,026 specimens. This increase of 36 percent (2,384 specimens) over the previous year is due to concentration on eliminating a backlog of accessions that could not be processed during previous years. The 69 accessions were assigned to the divisions and sections within the department as follows: Archeology, 20 (7,943 specimens);

ethnology, 30 (493 specimens); ceramics, 5 (69 specimens); period art and textiles, 3 (13 specimens); physical anthropology, 11 (508 specimens).

Archeology.—The prehistoric specimens received were from various parts of the world, as Trans-Jordan, Italy, Ecuador, Mexico, and the United States. They include 6,765 diverse artifacts from protohistoric Indian sites in Kansas and adjoining States, collected for the National Museum by Dr. Waldo R. Wedel, associate curator of archeology; 226 specimens from Ezion-geber, seaport to King Solomon's copper smelters, on the north shore of the Gulf of Aqabah, Trans-Jordan, collected by Dr. Nelson Glueck, director of the American Schools of Oriental Research, Jerusalem, and received as a gift from the Bruce Hughes fund; a carefully documented series of 193 potsherds from surface sites throughout Trans-Jordan, also collected by Dr. Nelson Glueck and presented by the Bruce Hughes fund; 486 diverse artifacts from the highlands of Mexico, including a selection of figurines and figurine fragments from the newly discovered archaic site of Tlatilco, a gift from Dr. W. F. Foshag; 149 stone, earthenware, and copper artifacts from the former Cherokee region of Tennessee and North Carolina, presented by Burnham S. Colburn; 17 earthenware vessels of Daunian ware, collected near Foggia, Apulia, Italy, and presented by Capt. Byron E. Farwell; a hammered copper ax with cut-out figures from the Province of Loja, Ecuador, the gift of Sr. Juan Ivan Cueva.

Ethnology.—This year's accessions in the division of ethnology included collections from North American Indian tribes of Alaska, California, Arizona, New Mexico, and the Great Plains; from Melanesian peoples of New Guinea and New Caledonia; from Indonesians of Java and Sumatra; from Negritos of the Philippine Islands; from Okinawa and the Shan States; from India, China, and Korea; and from Morocco and the Sudan.

Major documented field collections came from Melanesian villages of northeastern New Guinea. One of these, from the Aitape and the Saidor regions of the northeast coast of New Guinea, was received as a gift from Lt. C. T. R. Bohannan, who had obtained the specimens in 1943 and 1944 from natives as yet little affected by commercial contacts with the white race. The material consists of earthenware cooking utensils and storage containers, decorated wooden bowls, wooden drums with characteristic carved bird figurine embellishments, weapons of war and the chase, and other objects associated with the daily life of a primitive Melanesian people. Collections of this type are of value to the student of native cultures, since significant changes in native life in the Aitape and Saidor regions have transpired consequent to military activities. A well-documented collection of 76

ethnological specimens from the northeast coast of New Guinea was received through G. L. Barnes. Although the name of the collector remains unknown, the material is carefully labeled. It presents a cross section of coastal and inland Melanesian cultures in northeastern New Guinea. Included are weapons of warfare and the chase, costumes of bark cloth, head ornaments of woven bands decorated with animal teeth, headdresses of bird-of-paradise feathers, necklaces of boar tusks and shell, wooden disk arm bands, combs, dancing wands, netted bags and containers, utensils, and tools illustrating activities of Melanesian daily life. A collection of 67 ethnological specimens obtained in 1944 by Lt. Raymond R. Sheppard from Angel Island, which lies off Aitape on the north coast of New Guinea, came to the division as a gift of the collector. Angel Island was unoccupied at the time, owing to the activities of the Japanese, who had killed or driven off the native Melanesian population. Included in the collection are bowls and trays of carved wood, nets and bags of twisted and netted plant fiber, bark cloth, costumes, ornaments and objects of personal adornment, utensils and containers of coconut shell and bamboo, weaving apparatus, bows and drills for making fire, pigment stones, dance wands, and also bundles of spear points and blowgun darts. All originated from an area within Melanesia hitherto unrepresented in the division of ethnology. This collection may well be the last obtainable examples of unacculturated handicrafts from this sector of eastern New Guinea. A unique specimen in the form of an altar stave of carved wood was presented by Admiral William F. Halsey, U. S. N., who had received it as a gift from a New Caledonian native chief. The stave is of unpainted wood with carved conventionalized totemic designs representing mammalian forms. Carved staves of this type were erected in a semicircle where they formed an altar before which sacrificial rites, principally in the form of food offerings, were conducted.

Another important collection of 22 specimens came as a gift of Capt. Vernon L. Rodgers, who obtained the material while assigned to military service in the north section of the Southern Shan States of southern China. It consists of costume and hand-worked jewelry of the Bali people and of the Acca, a primitive mountain tribe. A Japanese Shinto sword and trappings obtained by the American army of occupation in Korea was presented by Lt. Gen. John R. Hodge, U. S. A., in the name of the Twenty-fourth Army Corps. The sword differs from the usual type of Samurai blade in that it was made for ceremonial use exclusively. The hilt of lacquered wood inlaid with silver is further decorated with lacquered bosses, cut peacock feathers, and tasseled cords. The scabbard of lacquered wood is inlaid with silver and ferruled with blue steel. The tang of the blade bears the

following inscription: "Made by Miyamoto Sugawara Kanennori, Lord of Jurayoshi, Hoki Province * * * a day in the first moon of the 22nd year of Meiji (1889)." Examples of art metalwork from Javanese, Sumatran, and other east Asiatic peoples, totaling 67 specimens, were received as a gift from Mrs. P. H. Davis who, with her husband, had acquired the objects during the period from 1900 to 1910, when they resided in Batavia, Java. In contrast with the primitive Melanesian cultures of eastern New Guinea, the metalwork and symbolism represented in the specimens included in this collection appear highly sophisticated and indicate an ancient mastery of the metal crafts. Indonesian work in brass and silver, although of Indian and Arabic derivation, is highly stylized.

The North American Continent, the source of most of the division's earlier and larger collections, is represented by two outstanding collections. The larger of these was received as the gift of the late Lt. Col. Charles E. Woodruff, through Mrs. C. M. Perkins. It was obtained in 1890 by the donor from the Hupa Indians of central California and from the Indians of the Great Plains, and consists for the most part of basketry and of skin garments and dance robes. A collection of weavings from the Navaho and Chilkat Indians was presented by Dr. and Mrs. Whitman Cross. The Navaho weavings were acquired on Indian reservations between the years 1885 and 1915 by Dr. Cross when he was engaged in geological work in the Southwest. The Chilkat blanket, which represents a form of weaving distinct from that of the Navaho, is patterned with mythological dissected animal designs in pastel shades of blue-green and yellow, and in natural white. The Chilkat weavers, who live in the vicinity of Juneau, Alaska, formerly used the hair and wool of the mountain goat and mountain sheep in their yarns.

The division of ethnology from its inception has curated a number of categories of objects, nonethnological in character but of interest to students of culture history. An interesting specimen of antiquarian interest is a Holy Bible with the Apocrypha, which was presented by F. W. Marsh. This Bible was printed from stereotype plates that were originally used for the third edition of the Isaac Collins Bible, which was issued in 1819. The section of ceramics was enriched by a gift from Mrs. Grace Hobbs Johnson of 64 specimens of American pressed glass containing examples representative of the glass houses of Sandwich, Mass.; Pittsburgh and Philadelphia, Pa.; and Wheeling, W. Va. Collectors of American pressed glass will find the type specimens included in Mrs. Johnson's gift useful for comparison and guidance in assembling and classifying their individual collections. Included are examples of the thumbprint pattern, the Sandwich loop, stippled grape and festoon, flat diamond, beaded mirror, pressed block,

bell flower, daisy, moon and star, ribbon, Rochelle, lacy, rose and snow, picket, pressed leaf, ribbed palm, beaded grape, pointed hobnail, Liberty Bell, cabbage rose, ball and swirl, hummingbird, chrysanthemum leaf, blackberry, beaded jewel, Egyptian, grapevine, beaded star, horseshoe, and other patterns characteristic of American pressed glass from the early and middle decades of the nineteenth century. Another interesting accession is a Stiegel type paneled flip glass presented by Miss Mary Ellen Dashiell. This glass, belonging originally to Charity Jenkins Boone, great-great-grandmother of the donor, is made of clear glass, and is presumably a genuine example of the work of the eighteenth-century glass house of William Henry Stiegel at Manheim, Pa. An important accession assigned to the section of period art and textiles consists of a collection of 10 pieces of Belgian needlepoint and bobbin-made laces dating from the period of World War I and presented by the Vicomtesse de Beughem. Several pieces in the collection had originally been made by Belgian lacemakers for presentation to Mrs. Brand Whitlock in token of gratitude for her aid extended to the Belgian women and girls working in canteens and other war projects.

Physical anthropology.—The 11 accessions totaling 508 specimens contained the following outstanding collections: A gift received from Dr. P. F. Titterington ranks as one of the best from the Midwestern States. Moreover, during this year Dr. Titterington made two additional donations of a total of 34 specimens collected in Calhoun County, Ill. These recently donated specimens mainly represent the prehistoric Hopewellian people as in contrast with the earlier material, which came mainly from Jersey County and represented the protohistoric Middle Mississippi people. Again this year Dr. Samuel Rabkin donated some cleared human fetuses. As stated in last year's report, these specimens have been cleared by the Schultze technique in order to demonstrate the state of skeletal development. Seven accessions involve skeletal material from six different States and the Territory of Hawaii.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Owing to the wide variety of materials used in the manufacture of ethnological specimens, such as feathers, hair, tanned hides, bone, wood, and textiles, a great responsibility must be assumed by this department in providing the necessary safeguards to prevent deterioration or destruction from insects, sunlight, temperature, and humidity. One can point with pride to those well-preserved objects that have required care and inspection over the past hundred years.

Specimens without adequate scientific provenience are constantly being eliminated from our older collections by means of gifts or ex-

changes to schools and smaller museums, where the record is not important. In the modernization of the anthropological exhibits every effort is being made, in the mechanical construction, to house the collections now assigned to the present floor space in the various halls.

Throughout the year the anthropological laboratory in collaboration with the division of ethnology gave precedence to the construction of miniature models, built according to accurate scale, which will represent the long-term program of modernizing one of the ethnological halls on the first floor. This projected program will make use of the natural-size human dioramas as well as replace all the floor cases housing specimens from the various Indian tribes in North and South America. The plan of the new exhibits is primarily geographic, beginning near the west end of hall 11 with the Patagonian cultures and extending through the South American Andean and rain forests, portraying diagnostic cultural scenes in Central America, Mexico, and the southwestern United States. These features will be graphically illustrated through well-lighted cases and painted panoramic backgrounds. Interspersed will be U-shaped cases illustrating, by miniature dioramas and well-selected objects, the material culture of these various groups. In the extreme northwestern corner of this hall it is planned to erect a large semicircular display portraying, by means of specimens, charts, and photographs, the story and development of physical man. To accomplish these ultimate goals will require many years with the present limited staff assisted by the office of the superintendent.

Archeology.—Two new exhibits were installed during the year—a series of Near East seals, selected and arranged by Joseph R. Caldwell, scientific aide, and an exhibition of foodstuffs from indigenous plants cultivated by pre-Columbian inhabitants of the New World. Several other exhibits were necessarily rearranged when those unique and type specimens evacuated during the war years were made available for display. A small but important archeological collection, recovered in 1898 from caves in Chihuahua, Mexico, but not marked at time of receipt, was at last identified with its assigned catalog numbers, and the Museum records were finally completed. Mr. Caldwell and Charles Terry, Jr., scientific helper, devoted a considerable portion of the year to the unpacking and redistribution of specimens returned from evacuation. Included in this task were diverse collections removed from the attic early in the war and temporarily stacked in room 356 and in the so-called war portrait gallery in the hall of American archeology. By the end of the year all these collections had been removed to the attic once again or placed in storage elsewhere; all other evacuated materials have been unpacked and redistributed except two drawers of ancient glass. These still await table space on which to set up a new exhibit and time for preparation of new labels.

The Ezion-geber and Trans-Jordan collections, following their return from evacuation, were arranged for cataloging.

Associate Curator Wedel personally sorted, classified, and listed his 1940 collection from Rice and Cowley Counties, Kans., and from sites in Oklahoma and Nebraska, a collection totaling 6,765 cataloged specimens. In addition to processing many of the lesser accessions received during the year, the curator, Mr. Judd, had the classification and description of the late Dr. Hrdlička's 1937 collection from the Aleutian Islands nearly complete as the year ended.

Arrearage continues an ever-present and growing problem. Collections in arrears June 30, 1941, included an estimated 53,000 specimens. Despite successive reductions, annual additions have since raised that arrearage to an estimated 61,000 specimens.

Ethnology.—During April 1946 the division of ethnology joined with other divisions of the Museum in an exhibition of cultural objects from Siam installed in the ground-floor foyer of the Natural History Building. This special exhibition featured a number of pastels and water-color paintings by students of the School of Arts and Crafts, Bangkok. The objects shown by ethnology illustrated the cultural life of the Siamese people of the nineteenth century. The religious life of the Siamese was illustrated by Buddha figurines of carved and gilded wood and of bronze, and by a miniature replica of a state funeral car, while marionettes of stamped and cut leather and theatrical masks typified the Siamese drama. Also exhibited were artistic weapons from the collection formerly presented by the King of Siam to President Franklin Pierce, while numerous other minor cultural objects, executed in horn, lacquer, earthenware, basketry, and other classifications, represented the handicrafts of the Siamese.

The special exhibition installed in the ground-floor foyer of the Natural History Building of equipment lent to the department by the Air-Sea Rescue Agency of the United States Coast Guard was continued throughout the year. The exhibition of this equipment, which contributed so much to the saving of lives and the rescue of sailors and service personnel, continued to be of unusual interest to visitors.

The study collections that had been removed from attic storage to lower floors of the Natural History Building during the war were returned to their permanent locations in the upper floors. Type collections and specimens of intrinsic value that had been removed from Washington as a safeguard were returned to the division and replaced in classified storage. As has been stressed by the head curator of anthropology and the director of the National Museum, the need for space remains acute.

The requirements of the military, particularly of the Quartermaster Corps of the United States Army, during the war again directed

attention to the potential value of ethnological collections, especially those dealing with the material culture of the world's primitive peoples. The restricted publications of the JANIS (Joint Army and Navy Intelligence Service) and the Civil Affairs Handbooks of the Office of Naval Operations include much information gleaned from ethnological literature and ethnographical collections. They clearly demonstrate the experience of the past few years relative to the value of material illustrating the economic life of isolated primitive peoples.

Robert A. Elder, Jr., assistant curator, continued to devote much time to the reclassification and placement of specimens in the extensive study collections of the division. The Museum's fumatorium was used in connection with all incoming collections, and also from time to time when necessary for the treatment of individual lots of previously accessioned specimens. The use of the new insecticide dichlorodiphenyl-trichloroethane (DDT) has met with some success in large exhibit cases, the construction of which does not permit the use of volatile insecticides that have proved efficacious in the airtight quarter- and half-unit storage cases housing the study series.

Physical anthropology—No change in the public exhibitions in this division was made during the year. Further improvement of the storage sections, including the painting and numbering of drawers, came to a halt this year when new racks for storage in rooms 342 and 374 could not be obtained. Plans have been drawn for the reorganization of these two rooms that will increase the drawer capacity by 180. Progress was made in the repair of the Belle Glade (Fla.) skeletal material collected under the Civil Works Administration in 1933–34.

Almost complete success has resulted in the attempt to identify, from the corresponding brains, a collection of nearly 50 skulls assembled between 1909 and 1912 with the aid of Professor von Hansemann, of Berlin. The heads were shipped to this country as wet specimens and the brains removed here for preservation and study. In the process of cleaning the skulls the metal tags became so corroded that identification could not be made. This year endocranial casts were made in the anthropological laboratory, so that by comparing the casts with the brains the curator, Dr. T. Dale Stewart, succeeded in identifying all but one. Thus the correct information as to sex, age, and other details preserved with the brains now can be recorded with the skulls. Incidentally, the detailed markings on the brain seem to be as distinctive as fingerprints for purposes of identification. Also, as a byproduct of this investigation, the endocranial casts proved to be of unexpected interest to anthropologists.

Anthropological laboratory.—Tasks of a wide variety were completed in the anthropological laboratory during the year. For the

division of archeology two pieces of Mexican sculpture were repaired, two Indian cooking pots were restored and repaired; 18 pipes, 1 glazed terra-cotta vase, and 2 Easter Island tablets were repaired. Two sections of rope from Ezion-geber were treated with a preservative, the color was restored on two pieces of Indian sculpture; five pieces of Indian embossed copper designs were mounted between glass, and a cast of the impression from an Indian pottery stamp was made. Pen-and-ink drawings of the front and side views of 27 Indian arrowheads were made, and 5 large casts of Greek statues were painted.

For the division of ethnology 11 pieces of Indian pottery were repaired and restored, and 16 Indian baskets and a number of smaller articles were repaired and treated with a preservative. A sculpture of a Mexican deity, a bone shield, Chinese porcelain vase, glass bowl and goblet, and a Japanese bronze figure were also repaired. In addition, a Swiss carving of a man and horse, a Siamese wooden statue, and 10 Polynesian wooden objects were repaired and restored. A New Caledonia altar stave, two wooden saddles from Okinawa, and several knives and daggers were cleaned and treated with a preservative. A number of swords, scabbards, and several objects of brass and silver were polished. A figure from the Chinese imperial costume exhibit was repaired and reinstalled, the naturalistic coloring of two Indian busts by Colon was restored, 15 Indian paintings by Kate T. Cory were cleaned, a Chukchee carved tusk from Siberia was mounted on a base equipped with a reflecting mirror, and the catalog numbers were engraved with acid on 12 silver spoons.

For the division of physical anthropology eight sculptures comprising the prehistoric man series by L. Mascre were bronzed, the bust of Mazaska was modeled, and endocranial casts of 21 human skulls were completed.

As in previous years, assignments were undertaken for other branches of the Smithsonian Institution. The manikin for the Mrs. F. D. Roosevelt costume exhibit was painted, photographed, and installed; and four casts of a human torso were made and painted for the division of history. A piece-mold and 14 casts of the modillion modeled in the laboratory were made; and a 1-foot length of egg-and-dart molding, 4 piece-molds, and 259 casts were made for the division of medicine and public health. Duplicates in natural color of three specimens were completed for the division of invertebrate paleontology. The porcelain cover for a vase was repaired and restored for the National Collection of Fine Arts. The sculpture throughout the building was kept in repair.

INVESTIGATION AND RESEARCH

During the past fiscal year 67 lots of specimens were received by the department for identification. All were subsequently returned to the

owners with a detailed report. Many man-hours were spent in providing the 679 letters prepared for official replies to correspondents. This represents an increase of 17 percent over the previous year. These figures do not include direct official replies to visitors or colleagues by members of the professional staff.

Requests for anthropological information from the various war agencies decreased; nevertheless, men discharged from the armed forces submitted in person various objects and mementos for identification from various parts of the world. Several manuscripts were prepared for publication, as indicated by the divisional reports.

Archeology.—Further progress was made by Neil M. Judd on a report describing the archeological collections obtained by him at Pueblo Bonito, N. Mex. Associate Curator W. R. Wedel devoted much time during the year to preparation of his final report on field work in Kansas from 1937 to 1940. He completed two shorter articles, "The Kansa Indians" and "Culture Chronology in the Central Great Plains," and then gave principal attention toward planning and organizing archeological field work for the Missouri Valley project. This work is part of a program being developed in conjunction with the National Park Service and other Federal agencies for the mapping of archeological sites and for partial salvage of archeological remains threatened with inundation by the construction of Federal dams under the river development program of the Corps of Engineers, United States Army, and the Bureau of Reclamation, Department of the Interior. An expanding correspondence and numerous consultations with individuals and organizations were natural concomitants of this planning. At the end of the fiscal year Dr. Wedel was prepared to leave for the field to assume direct supervision of a basin-wide archeological reconnaissance.

Joseph R. Caldwell, scientific aide, undertook revision and study of the South Carolina collections as the initial phase of a research program intended to disclose both the merits and shortcomings of our material from the Southeast. At the same time cultural affiliations are being restated in terms of the currently accepted classification scheme.

Nine lots of material were lent for study outside the Museum, and 15 lots were received for examination and report and subsequently returned to the senders.

Ethnology.—Progress was made in the preparation of a final report on ethnological and archeological explorations conducted by the curator, H. W. Krieger, during the period 1928–38 in the Greater Antilles. He prepared for publication a report on the work of the Inter-American delegation, of which he was a member, that investigated the ruins of Isabela, a settlement founded by Christopher Columbus in December 1493. These ruins, commonly described as the first permanent settlement of Europeans in the New World, are located at the mouth

of the Bajabonico River on the north coast of the Dominican Republic about 40 kilometers west of the city of Puerto Plata. This settlement is actually the second to be established by Europeans south of Greenland, inasmuch as Columbus had left a group of shipwrecked sailors at Cap-Haïtien, on the north coast of Haiti, where they constructed a fort from the timbers of a vessel wrecked on Christmas Eve, 1492. Neither this earlier settlement, which Columbus named La Navidad, nor Isabela became permanent towns, although Isabela continued to exist as the Spanish capital of the New World for 7 years until it was voluntarily abandoned in favor of a settlement at the mouth of the Ozama River on the south coast of the island.

The assistant curator, Robert A. Elder, Jr., was occupied as time permitted with the study of the George Catlin collection of ethnological specimens from the northern Plains Indians and of his paintings of North American Indian subjects.

Research work of outside investigators was furthered by making available for examination specimens from the collections, the carded catalogs and indexed references, the photographic files, and the division's collection of paintings, the last mostly of Indian subjects. Supplying the demand for photographs in answer to requests by individual correspondents and visitors is time-consuming, since it involves the assembling of appropriate specimens, the transfer of specimens to the photographic laboratory and their return to classified storage or to exhibits, and finally the identification and captioning of prints.

A number of specialists employed in the colonial service of foreign countries and in the island administration of the American Government spent considerable periods of time discussing with staff members the existing relations with primitive and colonial peoples. The Post Office Department requested opinions as to the value of material damaged in the mails. The Air Judge Advocate, War Department, requested an opinion regarding ceramic and other art collections damaged and destroyed in air accidents. Assistance extended to individuals was primarily in the form of letters written for official signature in reply to requests for information by correspondents, and in supplying information to visitors regarding privately owned specimens or collections of cultural material. Information requested pertained primarily to the identification of ceramics, glass, silver, musical instruments, heating and lighting devices, and generally to American and European period art. Fifty-one written reports were made pertaining to the examination and identification of collections totaling 106 specimens, all of which were returned to the owners.

Physical anthropology.—The curator's study of the Melbourne skull from Florida, which was mentioned last year, was completed and sent to press during the third quarter. Another paper, prepared as an address for the Anthropological Society of Washington under the title

of "Anthropology and the Melting Pot," will appear in the Annual Report of the Smithsonian Institution. In collaboration with Dr. P. F. Titterington, of St. Louis, Mo., Dr. Stewart completed a report on "More Filed Indian Teeth from the United States" for publication in the Journal of the Washington Academy of Sciences. Dr. Stewart also advanced his reports on the observations made during his visit to Mexico in 1945. In one of these reports he is describing Sr. Noguera's skeletal collection obtained in 1945 at Xochicalco and in the other he is discussing the distribution and significance of a little-known deformity type occurring in Mexico. At the close of the year Dr. Stewart began work on a report covering his excavations of 1938–40 at the historic Indian village located on Potomac Creek, Va.

The associate curator, Dr. Marshall T. Newman, spent a large part of the time since his return from the Pacific theater of war upon three projects: (1) A revision of a manuscript dealing with his work in Peru during 1941–42, entitled "Indian Skeletal Material from the Central Coast of Peru; an Archeologically Oriented Study in Physical Anthropology"; (2) the final report on the skeletal remains collected in Pickwick, Wheeler, and Guntersville Basins under the Tennessee Valley Authority in 1937–40; and (3) preparing in collaboration with Lt. Comdr. R. L. Eng, U. S. N. R., a manuscript concerning the physical status of Okinawans in 1945. The material for this paper was collected by the Naval Research Center set up on the island of Okinawa at the time of the occupation. In his spare time Dr. Newman completed history cards for old accessions within the division.

Dr. C. J. Connolly, of Catholic University, continued during most of the year to use the brain collection. As a result of having worked on these collections for so many years and published so many papers, Dr. Connolly has decided to combine this material into book form. During the early part of the first quarter Dr. Gemma Barzilai continued to work at irregular intervals on her study of the pelvis. Early in October two naval officers from the Naval Medical Research Institute in Bethesda, Md., consulted Dr. Stewart regarding anthropometric methods. The Navy was confronted with the problem of limiting personnel to the size of cockpits and turrets. Dr. Stewart accompanied the officers to the Naval Air station in Anacostia and discussed with them the problems involved in the individual planes. During the year Dr. Stewart furnished Dr. Miron Burgin, of the Library of Congress, with complete bibliographies on physical anthropology in Latin America for the years 1943 and 1944. These bibliographies will appear in the Handbook of Latin American Studies, which has been taken over by the Library of Congress Members of the staff were called upon on several occasions to furnish

anthropometric information to the War Department. Identification of skeletal material was made for the Federal Bureau of Investigation on nine occasions. Dr. Samuel Rabkin visited the division and supplied information concerning the fetal specimens he had donated.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Loans to other institutions during the year totaled 171 specimens. Anthropological specimens were presented to museums, schools, and other Government agencies. Thirty-five specimens lent to the Museum were withdrawn by the respective owners.

NUMBER OF SPECIMENS UNDER DEPARTMENT

On June 30, 1946, the department of anthropology officially listed a total of 728,318 cataloged specimens. This represents a net increase of 8,985. The following summary will indicate the distribution of specimens as assigned to the various divisions and sections within the department:

Archeology	494,809
Ethnology	183,228
Ceramics	7,654
Musical instruments	2,414
Period art and textiles	2,442
Physical anthropology	37,771
Total	728,318

DEPARTMENT OF BIOLOGY

(WALDO L. SCHMITT, *Head Curator*)

THE receipt of specimens from the Pacific region, with requests for their identification, continued heavy throughout the year following cessation of hostilities. In most of the divisions there was a marked increase in the number of specimens received, accounted for largely by accessions from individuals and various branches of the military and naval forces.

A number of field investigations were undertaken and, for the greater part, completed during the year. Dr. Leonard P. Schultz, curator of fishes, left on February 13 and Dr. J. P. E. Morrison, assistant curator of mollusks, on February 20, both to participate in a biological survey of the atom-bomb test site at Bikini Atoll, Marshall Islands. This investigation continued into the following fiscal year. From April 25 to June 30, in continuation of the Department of State's program of scientific and cultural cooperation with American Republics, Dr. E. A. Chapin, curator of insects, visited universities and experiment stations in Colombia in connection with studies initiated in 1942 on the coccinellid and scarabaeid beetles. Under the same auspices, Dr. Robert R. Miller, associate curator of fishes, was detailed from February 28 to May 27 to the U. S. Fish and Wildlife Service to assist in a survey of the fishery resources of Guatemala made in cooperation with the Guatemalan Government. The Secretary, Dr. A. Wetmore, and Watson M. Perrygo, scientific aide, made ornithological collections in Darién, Panama, in the period March 4 to April 21.

Dr. Paul Bartsch, curator of mollusks, retired on April 30, 1946, rounding out a full half century in the employ of the Museum, having been first appointed scientific aide in the division of mollusks on April 16, 1896. His professional connection with the Institution continues as honorary associate in zoology. Dr. Bartsch plans to complete a number of studies of mollusks that he has under way. Dr. Harald A. Rehder, associate curator of mollusks, was designated acting curator on May 1. Dr. William R. Maxon, curator of plants, retired on May 31, 1946, after nearly 47 years of service, and was appointed honorary associate in botany. He came to the division of plants in 1899 and was its active head since 1912. Under his leadership the National Herbarium was increased greatly, more than a million specimens of

flowering plants and ferns having been added during his tenure. He was succeeded as curator by Ellsworth P. Killip, formerly associate curator of the division.

ACCESSIONS

The year's accessions, numbering 1,187, brought to the national collections a total of 320,037 specimens. These were distributed among the several divisions and certain special sections comprising the department as follows: Mammals, 109 accessions, 4,765 specimens; birds, 72 accessions, 8,295 specimens; reptiles and amphibians, 65 accessions, 2,177 specimens; fishes, 75 accessions, 20,479 specimens; insects, 221 accessions, 207,100 specimens; marine invertebrates, 99 accessions, 5,559 specimens; mollusks, 180 accessions, 28,750 specimens (including helminths, 15 accessions, 8,080 specimens, and corals, 2 accessions, 19 specimens); echinoderms, 17 accessions, 158 specimens; plants, 346 accessions, 41,943 specimens; diatoms, 3 accessions, 630 specimens. In all, there were 52 more accessions and 122,575 more specimens received than in the previous year.

Mammals.—By transfer from the Army Medical Museum the division received 669 small mammals in 37 accessions, and from the Naval Medical School 65 in 4 accessions; for the greater part the material was collected from island bases in the Pacific, Japan, and the Philippine Islands. Also by transfer 448 mammals were received from the United States of America Typhus Commission from Japan, the Philippine Islands, China, Burma, and India, and 260 North American mammals from the United States Fish and Wildlife Service. Included in a gift of five handsome bear skins and skulls from Arthur H. Bannon were three grizzly-bear skins, few specimens of which are in the national collection. Dr. Carl L. Hubbs donated an unusually well prepared skeleton of a beaked whale from La Jolla, Calif.

Birds.—Financed by the W. L. Abbott fund of the Smithsonian Institution, M. A. Carriker, Jr., continued his ornithological work in Colombia, adding 1,357 birds and 10 sets of eggs to the Museum's collections. For the Museum the Secretary, Dr. A. Wetmore, assisted by Watson M. Perrygo, scientific aide, collected, among other material, 637 bird skins in Darién, Panama. Dr. J. P. E. Morrison collected 60 bird skins, 1 alcoholic specimen, and 2 eggs from the atom-bomb test site, Bikini Atoll. By transfer, in seven accessions, the division received from the Pacific area, chiefly the Solomons, Marianas, and Caroline Islands and northern Burma, 1,397 bird skins, 7 alcoholics, and 9 nests and set of eggs, from the Army Medical Museum, the Naval Medical School, and the United States of America Typhus Commission, and 7 bird skins from Truk Atoll, the first specimens in our collections from this island group, from the United States Fish and

Wildlife Service. Other Pacific material included gifts of 29 birds collected in the Admiralty Islands by Lt. Logan J. Bennett, U. S. N.; 7 skins of Manchurian eagles from Col. L. R. Wolfe, U. S. A.; 85 skins collected by S. Dillon Ripley and 7 collected by H. G. Deignan in Ceylon; and 27 Peruvian birds from Carl Krummel. From Ventura Barnés, Jr., there was the gift of the second known specimen of the Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*), and from Hoyes Lloyd came topotypes of 26 eastern Canadian birds. An exchange of 9 paratypes of forms of Venezuelan birds new to the collections was made with W. H. Phelps.

Reptiles and amphibians.—Approximately two-thirds of the 2,177 herpetological specimens in 65 accessions were received either from the Naval Medical Research Unit No. 2 or from Service personnel. Four NAMRU accessions yielded 1,308 reptiles and amphibians from the Admiralty Islands, the Marianas, and the Solomons. From these localities, the New Hebrides, and the Philippines five individuals in the United States Naval Reserve sent in 119 reptiles and amphibians in six accessions, as follows: Lt. Comdr. K. L. Knight, 23 specimens; Lt. Adrian C. Fox, 39; Lt. Richard G. Miller, 9; Lt. Robert I. Owen, 19; and Lt. (jg) A. K. Crews (through the Naval Medical School), 38. Other accessions worthy of note include 122 reptiles and amphibians in two accessions from Chiapas and Veracruz collected by Matthew W. Stirling while leading the Smithsonian–National Geographic expeditions in Mexico; 85 reptiles and amphibians in continuation of the valuable Haitian collections made and presented to the Museum by Anthony Curtiss; and 20 frogs of great value to the associate curator in her monographic study on the frogs of Brazil collected by the donor, Dr. Paulo Sawaya, in the vicinity of São Paulo.

Fishes.—Noteworthy transfers from other Government agencies consisted of 3,825 specimens of fishes from the Marianas collected by the Naval Medical Research Unit No. 2; 1,037 fishes from Chile, taken by the United States Fish and Wildlife Service in cooperation with the Chilean Government; 2,848 fishes from Louisiana and Texas, also from the United States Fish and Wildlife Service; and a specimen of a new species of cyprinid fish from the Grand Canyon received from the National Park Service. Two exchanges enhanced the collections: 34 Venezuelan fishes collected by Dr. F. F. Bond in 1938–39, from the University of Michigan Museum of Zoology; and 33 paratypes of Philippine and Indian fishes described by Dr. A. W. Herre, from the Natural History Museum, Stanford University. New to the collections were: the unique holotype of *Cyclopsetta decussata*, a flatfish described by Gordon Gunter, the donor; the third and fourth known specimens of a wholly blind eel, *Typhlosynbranchus*, collected by the donor, Capt. M. S. Briscoe, U. S. A., at Harbel, Liberia; 54 specimens

of a Guatemalan fish, *Signalosa petenensis*, from Lake Petén; and the paratype of *Ubidia magdalenensis*, new to the collections, from the author, Cecil Miles, together with 12 other Río Magdalena, Colombia, fishes. Other material of interest included a gift of 704 fishes from southern California and Baja California from the University of California, through Dr. Carl L. Hubbs; 356 fishes from the South Pacific collected by the donor, Lt. James R. Simon, U. S. A.; 2,206 fresh-water fishes from southern California, including the first specimens of the stickleback (*Gasterosteus williamsoni*) taken since the original material was secured in 1853, from Ralph G. Miller; 7 specimens of the rare humpback sucker (*Xyrauchen texanus*), from Mr. and Mrs. William P. Knoch; and a specimen of the rarely taken *Zaprora silenus* from off Oregon, from Oregon State College, through Dr. E. W. Harvey.

Insects.—The scientifically and economically most important entomological accessions for the year brought to the national collections in excess of 10,000 mosquitoes and 4,000 slides of chigger-mites from various Pacific islands and Burma as transfers from the Naval Medical Research Unit No. 2 and the United States of America Typhus Commission. The most valuable single addition to the chigger-mite collections consisted of 34 slide mounts, including paratypes of 28 species, received as an exchange from Squadron Leader Charles D. Radford, R. A. F. Outstanding among the collections of miscellaneous insects received from various members of the armed forces were some 10,000 specimens collected on Guam by Lts. G. E. Bohart and J. L. Gressitt, U. S. N. While cooperating with the Mexican Government in an economic geological survey, Dr. W. F. Foshag, the Museum's curator of mineralogy and petrology, obtained 2,500 miscellaneous insects for the national collections. The largest accession for the year was a transfer of about 140,000 specimens from the U. S. Bureau of Entomology and Plant Quarantine. The enormous collections received for identification from Army and Navy sources account for the greater part of this large transaction, which is almost twice the size of the one received from the department last year; included was an especially important collection of upward of 12,000 specimens from the division of insects affecting man and animals, Bureau of Entomology and Plant Quarantine.

Marine invertebrates.—Among the more important of the year's accessions in the division of marine invertebrates are the following that include type material: The cotype of a fresh-water shrimp from the Muséum National d'Histoire Naturelle, through Dr. Louis Fage; the type of a new species of sea anemone described by the donor, together with seven other specimens, from Dr. Sears Crowell; 5 slides, comprising 4 species, of fresh-water sponges, including a portion of

the type of *Trochospongilla leidyi*, from the University of Florida, through Miss Margaret C. Johnson; the type and paratype of a crayfish described by the donor, together with 23 other specimens, from Lt. George H. Penn, U. S. N. R.; the type and paratype of a new species of rhizocephalid, together with 17 crustaceans from Dr. E. G. Reinhard; and the neotypes of a parasitic copepod from Dr. Wilbur M. Tidd. Twenty-five accessions from 20 members or former members of the armed services contributed 1,185 crustaceans and 69 other invertebrates from the Pacific area, the Aleutian, Hawaiian, and Marshall Islands, Okinawa, and Saipan. Other accessions of interest were received from the Navy Medical Research Unit No. 2, 954 Pacific invertebrates collected in Guam, Rota, Okinawa, Pelelieu, and the Palau Islands; from the Bureau of Ships, United States Navy Department, 25 barnacles; from the Army Medical Museum, 36 crustaceans and 4 worms; from the Army Medical School, 3 crustaceans and 1 leech; and from the Eighteenth Medical General Laboratory 5 crustaceans and 2 leeches.

Mollusks.—Ten of the year's 168 accessions of mollusks included type material. Three holotypes, of which one is also a genotype, were received from Mrs. P. O. Underwood; 1 holotype from John Q. Burch; 1 holotype, together with 12 paratypes of one species, from Prof. Wesley R. Coe; 1 holotype, with 75 other specimens, from the Army Service Forces, Office of the Surgeon General; a type and paratype of the same species from Frank Lyman; 14 paratypes and topotypes of eight subspecies from Dr. C. G. Aguayo; 1 paratype from Dr. Jeanne S. Schwengel; 16 paratypes of a species and subspecies from the Museum of Comparative Zoology; 5 paratypes of one species from Stanford University; 49 specimens, including the topotypes of 14 species, from Dr. Carlos de la Torre. Transfers from the Army Medical Museum, the Army Medical School, and the Naval Medical School yielded 850 mollusks, chiefly fresh-water gastropods, from the Philippines, Okinawa, and Guam. Among the more important gifts from individuals in the armed services are to be enumerated 4,226 specimens collected in Japan and the Philippines by the donor, Capt. Ralph F. Honess, U. S. A.; 195 Philippine shells from Capt. M. S. Ferguson, U. S. A.; 884 Philippine shells from Maj. Harry J. Bennett, Sn. C., U. S. A.; and 178 specimens from Cpl. Robert Carlson, who collected them at Treasury Island in the northern Solomons. Worthy of mention also are the purchase by the Smithsonian Institution's Frances Lea Chamberlain fund of 39 lots of land shells of the Lord Calvert collection from the estate of Hugh K. Milliken; 1,840 Colombian mollusks donated by Oscar L. Haught; the gift of 855 land and fresh-water shells from Virginia by Prof. Paul R. Burch; the continued contribution of Mexican mollusks by Miss Marie E. Bourgeois,

amounting this year to 244 specimens; and two rare shells, one, *Thatcheria mirabilis*, from Japan, presented by Dr. Jeanne S. Schwengel, the other a rare Cuban land shell, *Chondrothyra percrassa*, donated by Dr. C. G. Aguayo.

Helminths.—The helminthological collections were materially enhanced by the most generous bequest of the lifetime collections of the late Dr. Henry Baldwin Ward, 8,000 lots of specimens including many types being received through Professor Ward's daughter, Charlotte B. Ward. Gifts of other type material were received as follows: 4 types and 2 paratypes of trematodes from Dr. Harold W. Manter; 12 slides of cotypes of a cestode from Dr. Bruce U. Crozier; 7 slide mounts of the type of *Hymenolepis furcouterina* from Miss Helen Edith Davis; the holotype and allotype of a new nematode from Dr. Ellsworth C. Dougherty; and 30 types and paratypes of miscellaneous helminths from Dr. J. Fred Denton.

Corals.—Nineteen specimens of corals were accessioned, 12 collected by the *Albatross*, transferred from the Fish and Wildlife Service, and 7 transferred from the Naval Medical Research Unit No. 2.

Echinoderms.—The year's accessions totaled 17, bringing about 158 specimens to the division; 10 accessions were received from the Navy Department; 3 from the Army; 1 from the Fish and Wildlife Service; and 1 each from Fred Bahovec, Mr. and Mrs. Milo W. Williams, and Dr. A. Wetmore and Watson M. Perrygo.

Plants.—The year showed a marked increase over last year in the number of plants received, 41,943 specimens in 346 accessions as compared with 30,442 in 283 accessions. This increase is largely the result of collections made by members of the armed forces while serving in the Admiralty, Aleutian, Caroline, Galápagos, Solomon, and Philippine Islands, Guam and other Marianas, Japan, Okinawa, New Guinea, Burma, and France. By transfer from the United States of America Typhus Commission the herbarium received 3,108 specimens of plants from Burma, collected in connection with a study of the correlation between plants and outbreaks of scrub typhus; and from the Foreign Economic Administration 319 plants collected in Ecuador by Drs. William C. Steere and Ira L. Wiggins in the course of quinine investigations. Three hundred specimens from the British West Indies were obtained by purchase. Among the outstanding gifts of plants to the national collections were 1,469 specimens from Colombia received in two accessions from Oscar L. Haught in return for identifications; 254 ferns from Colombia and Mexico from Dr. Elbert L. Little, Jr.; and 202 specimens from Venezuela, from Dr. Henri Pittier. Noteworthy collections were made for the Museum by H. A. Allard in the Dominican Republic and by Dr. Carl O. Erlanson in Panama; the latter accession totaled 1,800 specimens, the former about 5,000. The more important exchanges accounted for nearly 4,800

specimens, chiefly from Latin America, but in part from Sweden, the British Isles, and Canada, in 46 accessions from 16 institutions, as follows: the Royal Botanic Gardens, Kew; Royal Botanic Gardens, Edinburgh; Naturhistoriska Riksmuseet, Stockholm; Instituto Miguel Lillo and Instituto de Botánica Darwinión, Argentina; Instituto de Ciencias Naturales, Bogotá, and Comisión Botánica, Cali, Colombia; Estación Experimental Agronómica, Santiago de las Vegas, Cuba; National Museum of Canada; University of Washington; Stanford University; Allan Hancock Foundation, University of Southern California; Chicago Natural History Museum; Academy of Natural Sciences of Philadelphia; New York Botanical Garden; and Gray Herbarium, Harvard University. The principal accession received by the section of diatoms consisted of 570 slides of specimens and 20 samples of diatom earths obtained by purchase.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Exhibition series.—The renovation of the exhibits of American mammals is progressing. This year rock work was completed for the case of eared seals, three specimens were cleaned and repaired, and the bottom of the case was sanded to conform with the other displays. The taxidermist force under the direction of W. L. Brown, chief taxidermist, also completed and installed a new fluorescent-lighted case containing a series of North American birds representing forms verging on extinction. Shown are the California condor, Eskimo curlew, trumpeter swan, whooping crane, and two ivory-billed woodpeckers. Eleven mounted birds were placed on exhibition in the synoptic series and the District of Columbia collection; six of these replaced specimens removed from the exhibits. Fifteen mounted big-game heads were hung in the east rotunda stair well. The polar-bear group of three was thoroughly cleaned and the "snow" base on which they stand resurfaced.

Looking toward further additions to the Museum's new habitat groups of North American mammals, miniature models were made of five pronghorn antelopes and life-sized models, molds, and casts for two of them. Miniature models of three bison for a future bison group were also completed. An adult and young pigmy hippo, two chevrotains, and a black duiker were finished for the Firestone Liberian group; and rock work was started for the improvement of the appearance of the walrus case.

Mammals.—The division of mammals now has nearly 4,000 cataloged specimens that must await additional storage cases before they can be distributed in the regular study series. Most of the cases containing large and small skulls are crowded to capacity. Nothing much can be accomplished with the collection of skeletal material until all

parts of it can be reassembled in the attic and additional cases and some additional clerical help provided. The alcoholic collection, though crowded, is generally in good order. A total of 973 jars of brains were received from the division of physical anthropology.

Birds.—The rearrangement, reidentification, and labeling of the study series of bird skins continue to progress satisfactorily. About 20 half-unit and 32 quarter-unit cases containing the following families were covered in the course of the year: Anatidae (part), Bucerotidae, Coraciidae, Leptosomatidae, Upupidae, Phoeniculidae, Momotidae, Todidae, Coliidae, Trogonidae, Alcedinidae, Meropidae, Trochilidae, Paridae, and Paradoxornithidae, and, in addition, parts of the Troglodytidae, Tyrannidae, Formicariidae, Furnariidae, and Dendrocolapidae. All material received during the year was identified at least to species for catalog purposes. The study collections of the Fish and Wildlife Service, not yet merged with the Museum series, were extensively studied and reidentified in many parts by its curator, Dr. J. W. Aldrich.

Reptiles and amphibians.—As in other divisions concerned primarily with alcoholic collections, this division is urgently in need of more shelf and stack space, or the release of space now occupied by specimens not a part of the division's direct responsibilities. Containers are needed for larger specimens than can be satisfactorily accommodated at present. The collections are crowded but otherwise are in good order and condition.

Fishes.—With the aid of temporary assistance available for the greater part of the year, routine work, such as sorting, identification, cataloging, labeling, and caring for the physical welfare of the collections, is up to date except for 17 accessions totaling 4,276 specimens received after the curator and associate curator departed for field work. The study collections are in good state of preservation, but overcrowding and lack of space for expansion prevent efficient handling. Large numbers of specimens are at present stored in the offices, laboratories, and adjacent corridor.

Insects.—All improvements in general organization and arrangement of insect material of different groups are seriously restricted by the lack of adequate space and storage facilities. To some extent this situation can be alleviated by the addition of more cases and drawers, but in some sections additional floor space needs to be provided.

During the latter part of the fiscal year, seven of the Department of Agriculture specialists who served in the armed forces during the war were released and restored to their former positions in the division of insect identification. During their absence research on and organization of the collections were to a large degree suspended in the groups

with which these men were concerned. Because of personnel shortage in the division, large quantities of insect material that has accumulated in recent years remain unmounted and therefore not usable for reference or research.

As time permitted, the curator, Dr. E. A. Chapin, made the coccinellid material more available, arranging the entire collection of the genus *Hippodamia* in accordance with his recent revision of the genus. W. E. Hoffmann, assistant curator, continued the regrouping, remounting, and repair of the study material of the Oriental Pentatomoidea. Dr. R. E. Blackwelder, assistant curator, completed a preliminary rearrangement of half the subfamilies of the Staphylinidae preparatory to undertaking a major revision of the family.

Dr. A. B. Gurney, in charge of the Orthoptera and Neuroptera groups, returned from Army service late in the year. In his absence, the material handled in the course of routine identifications was incorporated. The Embioptera returned identified by Dr. E. S. Ross, of the California Academy of Sciences, made the National Museum collection of this group an excellent one with reference to New World forms. Some of the neuropteroid groups, particularly the Corrodentia and Odonata, are badly in need of thorough study, identification, and arrangement. These large collections are of little value to science at present.

The large and valuable collection of identified larvae of Coleoptera received from J. P. Kryger, of Denmark, was partly incorporated, and all larvae of the Carabaeidae reworked and rearranged. All the larvae of the genus *Dermestes* were restudied and relabeled where necessary. The type collection of Scolytidae was worked over, each holotype being placed in a separate labeled tray, and the entire collection arranged in alphabetic order for easy reference. In connection with his revision of the North American species of the large weevil genus *Conotrachelus*, L. L. Buchanan restudied all the material in the collection and relabeled and rearranged it. This W. S. Fisher did also for the collection of Bostrichidae in preparation for a revision of that family.

Dr. Harrison M. Tietz, of Pennsylvania State College, spent nearly 3 months early in the fiscal year in the Lepidoptera section completing the incorporation of the American Phalaenidae into one unit. As a result of two summers spent on the North American Phalaenidae, Dr. Tietz now has them completely organized. This makes possible much more efficient handling of both the identification and research work. The tropical Phalaenidae still require similar attention, but more cases and drawers will have to be furnished before this can be given. Since his return from Army service, W. D. Field made substantial progress in the rearrangement of the North American Notodontidae and the incorporation of new material in that family.

Thus far, work on 29 genera has been completed, but much remains to be done, since many series are badly mixed and all material needs to be reidentified. This will require considerable research and the preparation of numerous genitalic mounts. The whole collection of Lepidoptera is in good condition, but in virtually every family research work is needed for correct labeling and appropriate arrangement. The collection of lepidopterous larvae had larger additions than in any recent year, but much of the material acquired has yet to be placed in standard jars and properly labeled.

Some changes were made in the assignments of certain specialists in the section of Hemiptera during the year, necessitating a shift of portions of the collections of Homoptera. Louise M. Russell took over the Cicadidae, Membracidae, Cercopidae, and certain other groups of Homoptera formerly assigned to Dr. P. W. Oman. Approximately 20,000 specimens of Homoptera, mostly leafhoppers from the Davis, Ball, and Oman collections, were sorted and incorporated during the year, and nearly 8,000 specimens of Heteroptera, including 2,600 from the Ball, Andre, McAtee, and Stoner collections, were incorporated. Considerable progress was made in the mounting of the large quantity of determined Heteroptera and Cicadellidae that accumulated during the past several years. A capable preparator was assigned to this task. The organization of the segregated types of Heteroptera was also completed during the year, each holotype being placed in an individual tray and the collection arranged for ready reference. The general condition of the Hemiptera collections is reasonably good, and notable improvement was made in the families Corixidae, Miridae, Pentatomidae, and Tingidae. Various large groups, especially the Membracidae and Fulgoridae, are in an almost unworked condition, and much needs yet to be done in other parts of the Hemiptera.

The mosquito collection under Dr. Alan Stone grew rapidly, partly because of the fact that some of the personnel of the Naval Medical Research Unit No. 2 were actively engaged in working up large collections of mosquitoes from the Philippines, New Guinea, the Solomons, Okinawa, and Truk. Extensive collections of mosquitoes were also received from Army sources. The wartime additions have made the collection of mosquitoes probably the best in existence. It now contains representatives of 1,221 species with, in many cases, larvae and pupae associated with the adults. Further progress was made with incorporation of the Shannon collection of Diptera. The collection of Diptera is in good physical condition, but most of the families, and especially the muscoid groups, need extensive research before they can be properly organized.

The collection of Hymenoptera was shifted to facilitate consultation by the individual specialists. All aculeate Hymenoptera were placed in one room, the ants in another. As a result of the 5 months' tem-

porary appointment of V. S. L. Pate, of Cornell University, the Nearctic collections of three tribes of Sphecidae, involving more than 20 drawers of specimens, were completely reidentified and rearranged. Further improvements in the collection of aculeate Hymenoptera resulted from the incorporation of many schmitt boxes of Sphecidae and Pompilidae identified by outside workers. Lt. Comdr. R. M. Bohart worked over portions of the wasp collections, particularly the genera *Polistes*, *Eumenes*, *Rygchium*, and *Stenodynerus*. In the Ichneumonidae 23 drawers of material were restudied and rearranged. A large collection of Old World Braconidae belonging to the subfamily Spathiinae, returned by G. E. J. Nixon, of the British Museum, was incorporated. This collection formed the principal basis of Nixon's revision of the Old World Spathiinae recently published in London. The returned material included 120 holotypes.

The determined material of Thysanoptera is mostly arranged and readily available for reference and study, but much still remains to be incorporated for want of the necessary slide storage facilities. J. C. Crawford personally purchased a good deal of Thysanoptera material from collectors in South America and Cyprus and placed in the national collections a good representation of each species thus obtained.

Grace E. Glance continued the reworking and incorporation of the long-neglected Collembola, Thysanura, and Entotrophi material, incorporating also large quantities of new material, particularly Collembola acquired during the year. Although progress is extremely slow because of the extended study required in every family of these primitive insects, appreciable improvement has been made. For certain groups of the Entotrophi it has been necessary to prepare slide mounts of material formerly preserved in liquid. A notable improvement in the collection of Iapygidae resulted from the study of several large lots of material submitted by Duke University.

Following Dr. H. E. Ewing's retirement on September 30, 1945, Dr. E. W. Stafford, of Mississippi State College, was appointed by the Bureau of Entomology and Plant Quarantine for a period of 3 months to rework the collection of Mallophaga. He reidentified and rearranged nearly all the regular collection, bringing the nomenclature up to date. Dr. E. W. Baker, who took over the mites, sorted the Museum's large collection of Parasitoidea into the proper families in preparation for critical studies of subordinate groups, but little in this vast collection has yet been named specifically. Notable improvement was made in the trombiculid collections by Lt. G. W. Wharton, Jr., who worked in the division several months and identified a large collection from the South Pacific. The alcoholic mites and ticks, which had received little attention for several years, were entirely reorganized, and all the material placed in vials in standard jars.

H. H. Swift was employed by the Department of Agriculture for 6 months to reidentify and rearrange the spider collection. In this time he segregated all the material of the principal zoogeographic regions and sorted to genus most of the Nearctic material, reidentifying about one-fifth of the Nearctic collection. Mr. Swift also sorted about two-thirds of the Neotropical spiders to family and segregated a large part of the type material, an exceedingly difficult task since most of the types in Marx's collection had not been clearly marked. With his report on the collection Mr. Swift supplied a list of the holotypes and cotypes contained in the Museum's spider collection. It is a satisfaction to know that this spider collection, containing 30,000 specimens, is in far better order than it has been for several decades.

Marine invertebrates.—The assignment of a temporary cataloger to the division made it possible to catalog several years' accumulation of identified specimens of Crustacea, Pycnogonida, Sipunculoidea, Echiuroidea, Hirudinea, Ascidiacea, Hydrozoa, and Hydrocorallinae. The cataloging added over 100 new species and 20 new genera to the Museum's invertebrate study series. In the course of distributing this material, the entire copepod collection, among the most comprehensive in the world of both free-living and parasitic forms, was completely overhauled and rearranged by the assistant curator, Mrs. Mildred S. Wilson. Dr. R. S. Bassler, head curator of geology, as caretaker of the Recent Bryozoa, reported the identification of several thousand specimens of duplicate material for exchange purposes and the sorting into species of considerable Mediterranean material, especially from the rich fauna at Oran. Extensive collections from Flinders, Victoria, have been reduced, and several hundred species have been separated and photographed preparatory to study. Clarence R. Shoemaker, associate in zoology, with his review of the little-known pelagic Amphipoda of the Bermuda Oceanographic Expeditions of the New York Zoological Society, added much interesting material to the collection and brought the arrangement of that portion of the amphipod study series in line with the latest researches. Other smaller sections of the crustacean collections were overhauled and rearranged concomitant with the cataloging and intercalation of new material. The collection of Pycnogonida, growing rapidly as the result of the continued efforts of Joel W. Hedgpeth, of the Texas Game, Fish, and Oyster Commission at Rockport, Tex., was also examined, the cataloging brought up to date, and the entire collection rearranged. At the close of the year the long-planned rearrangement of the Ascidiaceae of the lower chordate collections was initiated because of the large amount of material identified by Dr. Willard G. Van Name, of the American Museum

of Natural History, while preparing the manuscript of his monographic report on "The North and South American Ascidians." Attention will next be directed toward the hydroid collections, which were materially enhanced by the identification by Dr. C. McLean Fraser, professor emeritus of the University of British Columbia, of many hundreds of specimens secured in the early days of the old United States Fish Commission, but not identified until the last few years, when Dr. Fraser was gathering distributional data for use in his recently published "Hydroids of the Atlantic Coast of North America."

An index to the genera of Arthropoda in the collection, a long-wanted tool for the more efficient handling of research work and inquiries for information, and the organization of the study series were gotten well under way during the year. The comprehensive index of copepod literature and species bequeathed to the Museum by the late Charles Branch Wilson was also brought up to date by Mrs. Mildred S. Wilson, assistant curator, who plans to continue her work on copepods and this invaluable reference file.

The sectional library was given its first virtually complete overhaul in many years. This included a check and improvement of the card catalog of the library.

Mollusks.—In caring for the molluscan collections, principal attention was given to the redistribution of the returned type material to the study series, the holotypes being segregated in a special case as the work progressed. Chief arrearages are in the distribution of cataloged specimens determined during the year and in cataloging the existing large backlog of previously identified material. Commendable progress has been made, however, by the temporary cataloger assigned to the division for the greater part of the year.

Helminths and corals.—As in former years, the helminthological collections were cared for by the staff of the zoological division of the United States Bureau of Animal Industry, which makes most extensive use of the study material. An extensive rearrangement of the corals will be needed when the portions of the collection stored on the second floor during the war years are returned to the attic.

Plants.—A total of 16,600 specimens of flowering plants and ferns were mounted during the year, 12,600 by contract and 4,000 by Mrs. Tillie E. Berger, scientific aide. In addition, 5,907 photographs of type specimens were pasted on herbarium sheets, 5,000 of these by contract. Mrs. Berger's successful efforts to improve the mounting situation resulted in an increase of more than 4,500 in the number of specimens and photographs mounted in 1945–46 over the preceding year. Nearly 2,500 typed or printed descriptions were also pasted on sheets, and 7,012 mounted specimens repaired. The number of speci-

mens stamped, recorded, and made ready for the herbarium by J. B. Walker, scientific aide, numbered 15,102. About 50,000 specimens and photographs still await mounting. About 80,000 mounted, stamped, and recorded specimens and sheets bearing photographs, mostly from continental North and South America, still await incorporation in the herbarium. The filing of Old World and West Indian mounted specimens, under the care of Dr. Egbert H. Walker and Emery C. Leonard, is well up to date. Dr. W. R. Maxon and C. V. Morton distributed into the collections several thousand ferns, leaving very little unincorporated material in this group. Routine distribution into the herbarium of the accumulation of flowering plants from continental North America was continued by Mr. Morton as opportunity offered. Ellsworth P. Killip and Joseph A. Ewan incorporated several thousand South American specimens, mainly in connection with identification work upon large collections which accumulated during the war. In the grass herbarium only a comparatively small number of specimens remain undistributed, Mrs. Agnes Chase and Dr. Ruth Chou having kept the work well up to date. During the year 627 specimens were added to the type herbarium, bringing the total number thus segregated up to 45,020. As in other years, Mr. Leonard, who has had immediate charge of the lower cryptogams, devoted about one day a week to them, distributing 2,670 packets, of which more than half consisted of algae, into the collections. There are still about 50,000 specimens, in varying stages of processing, to be distributed into the cryptogamic herbarium. Most of them are lichens, a group to which little attention has been given at the National Herbarium for many years. John A. Stevenson, honorary curator of the Lloyd mycological collections, reports that the collections were frequently consulted during the year by mycologists interested in the taxonomy of Polyporaceae, Thelephoraceae, and Gasteromycetes, fungi of economic importance in forestry.

Taxidermist shop.—Aside from work on the exhibition series in the public halls of the Museum, the taxidermists were called upon for a great deal of work in connection with the preparation and preservation of specimens forming a part of the study collections of the Institution. Time was also devoted to the planning and execution of models for future exhibits and the renovation of existing ones. Considerable attention was given to making molds and celluloid reproductions of snakes. Of the former 12 were completed, of the latter 4; 12 old plaster casts of snakes were repaired. Skins made up, remade, repaired, degreased, or dismounted, including animals skinned, included 115 mammals and 45 birds. Skeletons, as well as individual skulls and sets of leg bones other than those accompanying complete skeletons, attended to during the year included 1,806 mammals and 92

birds; 5 eggs were blown. During the year, 195 requisitions submitted by the curators were completed. Mrs. Roxie Simpson, taxidermist attached to the division of birds, degreased and remade 256 old skins, made up 19 fresh ones, roughed out 32 bird skeletons, and mounted a whistling swan.

INVESTIGATION AND RESEARCH

Mammals.—A history of the ten divisions constituting the department, entitled "A Century of Progress in Smithsonian Biology," was prepared by the curator, Dr. Remington Kellogg, for inclusion in the Smithsonian Centennial issue of *Science*. He also published descriptions of two new Philippine rodents and three new mammals from the Pearl Islands of Panama. The associate curator, Raymond H. Gilmore, reported upon the remaining collections of bones from cave sites and Indian burial mounds that have been on hand in the division for some years, published one article on "Arctic Mammalogy," and prepared several other manuscripts. Gerrit S. Miller, Jr., was engaged during the year with the revision of his "Checklist of North American Recent Mammals."

Birds.—During the year the curator, Dr. Herbert Friedmann, worked on the manuscript of the twelfth volume of Ridgway's unfinished monograph, "The Birds of North and Middle America." He also gave some attention to the fifth edition of the Checklist of North American Birds, to be published by the American Ornithologists' Union, and to a checklist of birds of Mexico being prepared by R. T. Moore, L. Griscom, and himself. He also published three papers on South American birds, as well as several book reviews. The associate curator, H. G. Deignan, saw publication of his report on the "Birds of Northern Thailand" and continued work on a checklist of the birds of Thailand and a critical catalog of the bird types in the Museum collection. Five of his papers on southeast Asiatic birds were also published in the course of the year. S. Dillon Ripley, formerly assistant curator, completed a report on the birds collected by Mr. Deignan and himself in Ceylon and published six papers and reviews, mostly on Oriental birds. Dr. A. Wetmore devoted part of his research time to the preparation of the next supplement to the A. O. U. Checklist of North American Birds and worked on his collections from Panama, Mexico, and Colombia. He published a review of the races of the brown pelican and also some notes on fossil bird bones.

Reptiles and amphibians.—Dr. Doris M. Cochran, associate curator, published a report on the reptiles and amphibians of the Pearl Islands, Panama, and also prepared copy for keys of the included species for mimeographing for use by the army personnel stationed in the islands.

Considerable progress was made with her monographic account of the frogs of Brazil for which about half the necessary illustrations are now complete.

Fishes.—The curator of fishes, Dr. Leonard P. Schultz, completed his final report on the Venezuelan fishes collected by him in 1942, as well as those secured by the U. S. S. *Niagara* in 1924–25. He also completed a revision of the genera of mullets, in which he described three new genera, as well as a revision of the genera of atherine fishes, in which two new species and five new genera are described. Three papers previously completed were published during the year. The associate curator, Dr. Robert R. Miller, published nine papers during the year and completed three papers dealing with the following research: the need for ichthyological surveys of the major rivers of western North America; correlation between fish distribution and hydrographic history in the desert basins of western United States, jointly with Dr. Carl L. Hubbs; and the cyprinodont fishes of the Death Valley system of eastern California and southwestern Nevada. He has the description of a new species of cave *Mollienisia* from Mexico and a discussion of *Chasmistes liorus*, a catostomid fish from Utah Lake, in progress. Dr. S. F. Hildebrand, of the Fish and Wildlife Service, working in the division, completed and saw publication of his "A Descriptive Catalog of the Shore Fishes of Peru" (U. S. National Museum Bulletin 189), and is now working on a similar handbook on the fishes of Chile, as well as a supplement to his earlier "Marine Fishes of Panama." Dr. Isaac Ginsberg, of the same service, continued work on his monograph of American gobiid fishes.

Insects.—During the year the curator, Dr. E. A. Chapin, completed and published his study of the genus *Hippodamia*. His studies of the coleopterous family Coccinellidae preparatory to a revision of this family were continued and other investigations undertaken for the purpose of facilitating identifications in both the Coccinellidae and the Scarabaeidae. The assistant curator, Dr. R. E. Blackwelder, continued work on the checklist of Latin American Coleoptera. Part 4 of this was published, and part 5 of the text has been typed. He also completed several small studies on bibliography and nomenclature. Research work on the subfamily Pentatomoidea of the Oriental region was continued by the assistant curator, W. E. Hoffmann. Because of the scattered and inadequate literature, much of which is in languages other than English, much time and energy had to be spent upon a study of the literature. Dissections and study of the genitalia were made to permit the accurate determination of genera.

The Coleoptera section was not so adversely affected by the diversion of manpower to the war as some of the other units of the division.

W. S. Fisher completed his first draft of a large revisionary work on the North American Bostrichidae. He also carried on intermittently studies on the Anobiidae begun 3 years ago. L. L. Buchanan completed one paper treating of six North American species of the hickory weevils belonging to the genus *Conotrachelus*. The resignation of Dr. J. M. Valentine brought to a halt research studies on the family Elateridae. He expects, however, to complete a revision of several genera belonging to one tribe of this family, for which illustrations have been prepared. Dr. W. H. Anderson continued his researches on the larvae of the Rhyncophora and completed the descriptions and most of the illustrations pertaining to 12 of the subfamilies studied. Before his enlistment in the Army, Dr. B. E. Rees had begun a study of the larvae of the North American species of *Dermestes*, a group of much economic importance. Since his return he completed this paper, made a beginning on a study of the larvae of the Chrysomelidae, and reorganized his prewar work on the larvae of the Coccinellidae.

The Lepidoptera section was particularly hard hit during the war, with the result that virtually no research was possible. However, H. W. Capps worked on a classification of the Lepidoptera based on larval characters. He also completed and submitted for publication a key to the larvae of the species of *Keiferia* and *Gnorimoschema* feeding on tomatoes, eggplant, pepper, and potatoes. Further, he studied the adults of the genus *Leucinodes* in connection with an investigation he carried on in Mexico during the winter. While still on military duty in Europe, J. F. G. Clarke was granted authority to spend a few weeks studying Lepidoptera at Paris and in the British Museum. At Paris he segregated the Ragonot types of Phycitidae and received permission to remove the abdomens for the making of genitalic slide mounts by Carl Heinrich. Slide mounts of 33 types have been made. At London Mr. Clarke studied the types of some Microlepidoptera and obtained information on the types of certain species of Phycitidae for Mr. Heinrich. The year saw the publication of "The North American Clear-wing Moths of the Family Aegeriidae," by the late George P. Engelhardt, issued as U. S. National Museum Bulletin 190.

A study of the tribal divisions of the Aleyrodidae of the Hemiptera was completed by Louise M. Russell, except for certain illustrations. Miss Russell also revised and brought up to date a large manuscript prepared in 1942 on the genus *Trialeurodes*, and completed a study of a new psyllid in the Belgian Congo. Dr. P. W. Mason continued his studies on the aphids of the genus *Macrosiphum* and devoted some time to studies of the genus *Kakimia*. Dr. P. W. Oman returned from military service in February and has since then reviewed his manu-

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script on Nearctic Cicadellidae. In the Heteroptera taxonomic research was limited, owing to Dr. R. I. Sailer's participation in DDT studies, including the preparation of a report on the effect of DDT spraying on the fauna of the forest floor.

In the Diptera section Dr. Alan Stone, jointly with Lt. D. S. Farner, U. S. N. R., published a paper on a group of mosquitoes belonging to the genus *Aedes*. He also prepared a section on taxonomic technique for a manual of malariology edited by Mark F. Boyd.

In the aculeate Hymenoptera V. S. L. Pate completed a study of the genus *Crossocerus*, subgenus *Eupiloides*. Along with Dr. R. I. Sailer, of the Hemiptera section, Dr. H. K. Townes devoted a considerable part of the year to studies associated with the DDT experiments in Pennsylvania and Maryland, completing and submitting for publication a report on the effect of large-scale treatments of forest areas upon aquatic insects and, in collaboration with others, upon terrestrial insects also. Dr. M. R. Smith completed for publication several papers dealing with ants of the genera *Polyergus*, *Cryptocerus*, *Stegomyrmex*, and *Apsychomyrmex*, as well as a comprehensive generic and subgeneric synopsis with numerous illustrations of the Nearctic ants based on the worker caste.

In the Thysanoptera J. C. Crawford reports progress on a revision of the species of *Thrips* of the eastern United States and also the completion of a professional key to the Nearctic species of the genus *Sericothrips*.

Since no attention had been given to the Collembola, Thysanura, and Entotrophi until the past 2 or 3 years, nearly all Miss Grace Glance's time was confined to the development of a satisfactory reference collection. She did, however, make a beginning on a revision of the collembolan genus *Xenylla*.

In the section of ectoparasites and Acarina, for want of help only the Acarina received attention. Here Dr. E. W. Baker continued his study of the genus *Brevipalpus*. It was found that in many cases specific distinctions are sharper in the early instars than in the adults. Dr. Baker also completed his first draft of a revision of the mite family Cheyletidae, a study of a group of North and Central American mites of the family Penthaleidae, and a short paper describing a new species of *Cheloribates* from India. This new species has been suspected as an alternate host of the sheep tapeworm. In collaboration with Lt. G. W. Wharton, Jr., of Duke University, Dr. Baker undertook a classification of the families of mites, which will include keys to all known families and genera and establish genotypes, with illustrations of mites representing all the families, a discussion of the economic significance of the major groups, and such biological data as may be available.

Marine invertebrates.—The assistant curator, Mrs. Mildred S. Wilson, continued revisionary studies of certain genera of marine copepods, completing and submitting for publication an account of the species of the genus *Platycopia*, for which she described a new species. She also made some progress with the genus *Pseudocyclops*, for which she discovered several species new to American waters. Clarence R. Shoemaker, associate in zoology, published the results of an intensive study of the little known and heretofore sparsely collected pelagic amphipods in his account of "The Amphipoda of the Bermuda Oceanographic Expeditions," and returned with renewed interest to the preparation of further revisions of the genera of amphipods of the western Atlantic. Dr. R. S. Bassler has segregated and photographed several hundred species of Australian Bryozoa preparatory to a report upon that material. Dr. J. A. Cushman's further researches on recent and fossil Foraminifera have materially enhanced the collections he maintains at Sharon, Mass., and the national collections at Washington as well. Several of his papers were published during the year.

Mollusks.—The curator of mollusks, Dr. Paul Bartsch, continued work on the east Pacific turrid mollusks, as well as that on the Cuban members of the family Urocoptiidae in collaboration with Dr. Carlos de la Torre. He also completed several smaller papers. The associate curator, Dr. Harald A. Rehder, also completed several papers describing new species which he discovered in the course of identifying incoming collections. Dr. J. P. E. Morrison, assistant curator, completed a report on the mollusks gathered by the Secretary and himself in the Pearl Islands before his departure in February to take part in the biological survey of Bikini Atoll in connection with Operations Crossroads.

Plants.—The botanical studies accomplished during the year were in general a result of current identification work. Dr. W. R. Maxon, curator, and C. V. Morton, assistant curator, completed several articles on ferns; one by Mr. Morton on the fern genus *Hymenophyllum* is being published in the Contributions from the United States National Herbarium. Ellsworth P. Killip, associate curator, made progress toward the completion of his papers on the Papilionaceae of Colombia and on the Andean species of *Cordia* and *Tournefortia*. Emery C. Leonard, assistant curator, continued work on his revisions of the Acanthaceae of Colombia and Argentina. He also made further progress on the illustrated flora of Hispaniola, upon which he has been working for several years. Dr. E. H. Walker, assistant curator, has a new edition of his "Checklist of Plants in the Washington-Baltimore Area" in course of publication. He also prepared a subject index to E. D. Merrill's "A Botanical Bibliography of the Islands of

the Pacific," both the bibliography and the index to appear in an early number of Contributions from the United States National Herbarium. Joseph A. Ewan, assistant curator, about completed synopses of the South American species of *Vismia* and *Macrocarpaea* and of the Colombian species of *Spigelia*, as well as a bibliography dealing with José Celestino Mutis and Colombian botany, a project he has undertaken at the request of Jardín Botánico, Madrid. The employment of Dr. Ruth Chou as aide, made possible by the Department of State under its program of Cooperation with American Republics, enabled Mrs. Agnes Chase to resume her monographic study of the grasses of Brazil. These investigations were temporarily laid aside for the last few months of the year, in order to complete a revised edition of Hitchcock's "Manual of the Grasses of the United States." This work was done at the urgent request of the Department of Agriculture.

Diatoms.—The associate curator, Paul S. Conger, continued his study and identification of diatoms of the Presidential Cruise of 1938. Further work was also done toward improving the method for making micrometric scales for direct measurement of minute objects.

IDENTIFICATION, DISTRIBUTION, AND EXCHANGE OF SPECIMENS

The number of lots of specimens sent in with requests for identification was as follows: Mammals, 88; birds, 48; reptiles, 37; fishes, 36; insects, 107; marine invertebrates, 66; mollusks, 140; helminths, 6; corals, 1; echinoderms, 7; plants, 307; a total of 843. Not included are 21,207 lots of specimens received by the division of insect identification, U. S. Department of Agriculture. The total number of lots received for identification represents about a 7 percent increase over last year. The total number of specimens from all sources identified during the year approximated 63,000, not including 49,268 identified by members of the staff of the division of insect identification.

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions, government agencies, and private individuals, aggregated 51 transactions; 1,478 specimens were sent out in exchange, 1,350 as gifts, and 1,003 as transfers. The 18,347 plants distributed in 115 exchanges, aside from a special distribution of 2,900 lower cryptograms, went to 61 institutions and correspondents. Fourteen photographs of fishes used as namesakes of submarines were transferred to the Navy craft concerned during the year.

NUMBER OF SPECIMENS UNDER THE DEPARTMENT

The summary of specimens given below is based on the numbers estimated for the previous fiscal year, with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time.

No estimate has yet been made for the corals, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions lots consisting of minute organisms are frequently counted as single specimens though they may contain hundreds and even thousands of individuals, the enumeration of which could serve no useful purpose. Last year, through an oversight, 10 specimens failed of inclusion in the total of specimens under the division of mammals. They have been included in the current year's count. In the closing month of the fiscal year a recheck of the collection of plants showed that the earlier estimate was too low by about 338,000 specimens. The corrected total is given below. Processed specimens, such as plants mounted or diatoms mounted on slides during the year from duplicate and other material on hand, account for any other unspecified increase in the annual totals of these groups.

Mammals		252,596
Birds:		
Skins	298,381	
Alcoholics	18,295	
Skeletons	10,104	
Eggs	92,100	
		418,880
Reptiles and amphibians		132,430
Fishes		1,325,047
Insects		5,844,757
Marine invertebrates		1,062,454
Mollusks		3,143,134
Helminths		43,173
Echinoderms		177,745
Plants		2,215,000
Diatoms:		
Slides	20,870	
Crude and prepared samples	25,091	
		45,961
Total		14,661,177

DEPARTMENT OF GEOLOGY

(R. S. Bassler, *Head Curator*)

With the war's cessation the activities of the department of geology quickly trended toward normalcy, with increasing demands on the services rendered to the public and to scientific and educational institutions.

The illness and subsequent death of our esteemed curator of vertebrate paleontology, Charles W. Gilmore, and the passing soon afterward of his veteran preparator, Thomas J. Horne, during the first half of the fiscal year, were grievous losses to the staff. Genial Charles Gilmore, with his rare combination of abilities for both exhibition and research work, will long be remembered not only for his contributions to knowledge but also because of the Museum's hall of dinosaurs, for which he was responsible. Visitors to this hall will learn from the exhibition labels of the important part Mr. Horne had in the preparation and installation of many of the striking mounted specimens.

Curator William F. Foshag returned on October 8 to his Museum duties from his supervisory mineral surveys in Mexico, after 3½ years absence in war work. Associate Curator C. L. Gazin terminated his military service the latter part of December and was appointed curator of vertebrate paleontology in January 1946. In May, Franklin L. Pearce, recently discharged from the Army, was appointed preparator in this division. The appointment of Dr. Alfred R. Loeblich, Jr., to the vacant position of associate curator of invertebrate paleontology and paleobotany in May 1946 brought the geological staff back to its prewar strength. The staff was further strengthened by the selection of Dr. J. Brookes Knight as research associate in invertebrate paleontology, for studies of the difficult and much neglected Paleozoic Gastropoda. Finally, the return of Dr. Wendell P. Woodring, specialist of the Geological Survey in Cenozoic geology and paleontology, to his studies on the Museum collection, brought resumption of active work in this division.

Field work was pursued in all three divisions with varied and interesting purposes. First, mention should be made of the request of General MacArthur that Curators Foshag and Henderson be detailed to classify and evaluate large collections of gemstones brought together in Japan. Both are still occupied in Tokyo with this assignment, which started on May 25. Curator C. L. Gazin, with his preparator Franklin

Pearce, left May 23 on an expedition to renew exploration of the early Tertiary formations of central Utah and to carry on further collecting of fossil mammals from the Middle Eocene rocks of the Bridger Basin of Wyoming. Their explorations were still in progress at the close of the fiscal year. An expedition by Drs. Cooper and Knight to the Glass Mountains of Texas for the collection of Permian fossils, a 6 weeks' field study of Ordovician stratigraphy and fossils in the southern Appalachians by Drs. G. A. and B. N. Cooper, and a short trip to the Central Mineral Region of Texas by Curator Cooper, were highlights of the year in the division of invertebrate paleontology and paleobotany.

ACCESSIONS

The total number of accessions registered in the department amounted to 140, consisting of approximately 45,163 specimens, as compared with 130 accessions and 23,770 specimens reported for the previous year. The division of mineralogy and petrology received 56 accessions (1,373 specimens); invertebrate paleontology and paleobotany, 77 accessions (43,767 specimens); and vertebrate paleontology, 7 accessions (23 specimens).

Mineralogy and petrology.—The mineral collection continued its growth, partly through the several funds of the division, but largely through gifts. Three new minerals not hitherto represented were donated; cattierite and valsite from Prof. Paul F. Kerr, who described these species, and salesite from Robert C. Linck; while the new species sampleite was obtained by exchange from Harvard University. Other desirable minerals received as gifts were brucite from Gabbs, Nev., from Charles J. Vitaliano; gibbsite from Paramaribo, Surinam, from H. Schols; uranophane, a uranium compound from the Amphlett Mica mine, from A. W. Amphlett; a large pure mass of livingstonite and one of scheelite from Mexico, from C. W. Vaupell; a specimen of the rare zinc mineral rosasite from Arizona, from Arthur L. Flagg; and the manganese silicate knebelite from Stark, N. H., from Harold J. Verrow. Dean F. Frasche continued his interest in our growth with the gift of a series of rare minerals, including uranium compounds, from the Belgian Congo.

The mineral collection of Dr. Whitman Cross, containing specimens from many old classical localities in Europe and the western United States, presented by Dr. and Mrs. Cross, added historically interesting specimens.

By transfer from the United States Geological Survey came nontronite, the hydrated silicate, and boehmite, the alumina in clay, from Washington, and serpentine, variety picrolite, from North Carolina.

Among the numerous geological specimens secured by Curator Foshag during his work in Mexico were fine sal-ammoniac crystals

and other sublimates from Parícutin Volcano, rare mercury minerals from Huahuaxtla, Guerrero, and other interesting minerals.

Purchases through the Roebling fund included a collection especially of silver minerals, part of the collection of Carlos Hoffman, of Mexico City; a kidney-shaped mass of wood-tin, weighing 85 pounds, from Durango, Mexico, and a large mass of the rare mercury-antimony sulphide livingstonite from Huitzuco, Mexico. A specimen of diaboleite from Tiger, Ariz., and minerals from such widely separated areas as Argentina and England were also secured through this fund. Outstanding specimens from the Canfield fund include a fine exhibition group of sulphur crystals from Sulphur, Nev., a collection of Franklin Furnace, N. J., minerals, and a specimen of stibiotantalite from Mozambique.

The chief accessions of ores came, as usual, by transfer from the Geological Survey. They include a considerable series of mica specimens from New England and Brazil, and asbestos from Canada and Vermont, collected by David M. Larrabee; described chrome ores from Cuba secured by T. Thayer; and ores of aluminum (bauxite) from Palau Islands collected by Dr. H. S. Ladd. Extensive sets of mercury ores, copper, and fluorspar were included in the curator's Mexican materials. A series of rare ores from the Belgian Congo and western Australia was presented by Robert Waskey.

The principal addition to the rock series was the extensive collection of lavas, ash, and other eruptive products from Parícutin and adjacent areas made by Curator Foshag during his studies of this newborn Mexican volcano.

Three meteorites not previously represented in the Museum series were presented by Dr. Stuart H. Perry. These consisted of a slice of the Pine River, Wis., meteorite, a specimen of the Dimmitt, Castro County, Tex., fall (weight 3,576 grams), and one specimen of the Livingston, Tenn., occurrence. In this connection, a gift by Dr. Eliot Blackwelder of silica debris, explosion debris, and quartz flour from Meteor Crater, Ariz., should be mentioned since these materials are supposed to have been formed by a meteor's impact at this place in prehistoric times.

The most important additions to the gem collection came as transfers from the Procurement Division of the Treasury Department. They include a large blue topaz of 685 carats, 3 fine aquamarines, the largest of 73 carats weight, an amethyst of 32 carats, and a tourmaline of 10 carats. Nicola G. D'Ascenzo continued his interest in the collection by adding the rare gem hambergite, a fine moss agate, as well as a sapphire colored yellow by means of X-ray treatment. Capt. Cecil T. Wallace donated 21 fresh-water pearls from the White River of Arkansas, and Dr. Edwin Kirk presented a jade bracelet showing green, lavender, and white colors in one piece. The gift from Otis

Beall Kent of 41 strands of beads provided a colorful addition to the exhibition series.

Outstanding among the gems received through the Canfield fund is a flawless, curiously etched beryl (aquamarine) of 201 grams weight, from Minas Gerais, Brazil. Through the Roebling fund a splendid chrysoberyl from Ceylon, weighing 120 carats, and the rare gem enstatite, were added to the gemstone collection. As a gift from the Frances Lea Chamberlain fund a collection of 29 alexandrites from Russia was secured.

Invertebrate paleontology and paleobotany.—The year's gifts in this division are comprised of many interesting additions to the Paleozoic collections. Important accessions for the different periods are given below.

From rocks of the Cambrian period there were gifts of two unusual specimens of the trilobite *Alokistocare* from E. W. John, an excellent example of the cystid *Eocystites* from T. O. Thatcher, and a most desirable accession of 367 type specimens of Middle Cambrian brachiopods from Montana, described by Dr. W. Charles Bell, and Middle Cambrian trilobites, described by Dr. Charles Deiss, donated by Montana State University, through Prof. Wayne R. Lowell.

From the Middle Ordovician were recorded 425 specimens from the unique cryptovolcanic structure at Kentland, Ind., gift of Dr. Robert R. Shrock, 73 specimens of brachiopods from Pennsylvania, from Dr. Lawrence Whitcomb, and 750 specimens of Bryozoa, corals, and other classes from Virginia and Tennessee, from Dr. Byron N. Cooper.

Under the Devonian were added 50 specimens from New Mexico, gift of Dr. Carl C. Branson, 170 specimens from Missouri, from Dr. Darling K. Greger, and 700 brachiopods from southwestern Ontario from Charles Southworth.

From the Upper Paleozoic rocks donations included one rare Pennsylvanian crinoid and 180 Pennsylvanian and Permian gastropods from New Mexico, received from Dr. Carl C. Branson; 500 specimens of Pennsylvanian fusulines, from V. H. Chase; 20 Permian gastropods from Dr. M. K. Elias; 35 specimens of Mississippian fossils from Kentucky Dam near Gilbertsville, Ky., from Portland P. Fox; approximately 5,000 specimens of Pennsylvanian fossils from near St. Louis, Mo., from Dr. J. Brookes Knight; 35 specimens of Pennsylvanian, Permian, and Triassic fossils from Idaho and Kansas, from Dr. Norman D. Newell, and 250 specimens of Pennsylvanian invertebrates from near Moab, Utah, from Dr. H. E. Vokes.

Gifts through the Springer and Walcott funds added other worthy Paleozoic fossils. Ten unusually fine crinoids were thus obtained through the Springer fund; 6 specimens from the Devonian of Ontario; and 4 specimens from the Silica shale of Ohio. Walcott funds were expended on two purchases and three field expeditions. The

material purchased consisted of 36 specimens of brachiopods and pelecypods from the Devonian shales of Ohio, and 2,100 Cenozoic mollusks from the Lord Calvert collection. The field trips conducted by Dr. G. A. Cooper and his associates resulted in about 5,000 specimens of Ordovician invertebrates from Alabama, Georgia, Tennessee, and Virginia, a similar number from the Mississippian and Pennsylvanian rocks of central Texas, and an equally large collection of Upper Paleozoic fossils from west and central Texas, together with 400 blocks from west Texas containing silicified fossils for etching.

The division received the following Mesozoic fossils by gift: An exceedingly valuable and carefully prepared collection of approximately 3,500 slides of Cretaceous Foraminifera from Arkansas, collected by Dr. W. H. Deaderick and donated by Mrs. Deaderick; a specimen of the fossil wood *Cupressinoxylon* from the Cretaceous of Maryland, from the Little Museum, Lansdowne, Md.; and 51 specimens of Cretaceous Foraminifera from Peru, from Benton Stone.

Many specimens were donated to the Cenozoic invertebrate collection. Four thousand fossil fresh-water shells were sent in by Marie E. Bourgeois; 14 Tertiary echinoids from Alabama from Dr. Carl C. Branson; 1,070 specimens of Tertiary fossils from Mrs. Effie M. Clark; 72 specimens of Pleistocene fresh-water gastropods from Utah, from Lt. R. L. Ives; and 12 paratypes of fossil mollusks from Dr. S. S. Berry.

Important collections transferred by the Geological Survey were: Approximately 3,700 types of Carboniferous and Permian fossils described mainly by the late Dr. George H. Girty; 76 specimens of Tertiary fossils from the Ohio Oil Co.'s Hammond No. 1 well at Salisbury, Md.; 200 Jurassic invertebrates from Sage Creek dome, Wyo.; 585 specimens of the ammonites *Prionotropis* and *Prionocyclus* from the Cretaceous of Wyoming, recently described by Dr. Otto Haas; approximately 1,000 specimens of Devonian and Mississippian fossils from the Central Mineral Region of Texas; and 95 Upper Cretaceous mollusks, including some types, from the Ripley formation near Dumas, Miss.

Among the notable specimens obtained by exchange are the following: 350 specimens of Mississippian invertebrates from Missouri, including an excellent representation of Fern Glen fossils, from Dr. Darling K. Greger; 101 Mexican Jurassic and Cretaceous invertebrates from the Instituto Geológico de México; 3 type specimens of Permian nautiloid cephalopods from the Chupadera formation of New Mexico, from Dr. S. A. Northrop; 30 specimens of late Silurian cystids from Dave Palmer; 50 Ordovician brachiopods from Trenton limestone of Quebec, from Dr. Franco Rasetti; 50 specimens of Paleozoic invertebrates, including 25 type specimens, from Dr. C. E. Decker;

and 127 specimens of Cretaceous and Paleozoic microfossils, including 50 types, from Dr. C. G. Lalicker.

Vertebrate paleontology.—The decrease in materials received in this division resulted largely from the fact that no expeditions to secure fossil vertebrate specimens could be carried on until just prior to the close of the fiscal year.

The extreme rarity of fossil bird remains made the gift of vertebrae, mandibles, and other bones of the extinct cormorant *Phalacrocorax auritus* from Florida, by Walter W. Holmes, very desirable. A fossil bird's egg from Hot Creek Valley, Sioux County, Nebr., presented by Al Daniels, was an interesting addition. Five fossil examples of the puzzling egg capsules of chimaeroid fishes from the Upper Cretaceous rocks of Mexico and elsewhere, studied by Dr. R. W. Brown, of the United States Geological Survey, were transferred by that organization.

Other vertebrate materials worthy of special mention are a mammoth tooth found in the mountains of Ecuador, presented by the estate of Miss Sophie P. Casey; 13 specimens of the fish *Mallotus villosus* found fossilized in concretions on the banks of a fiord on the west side of Greenland, from Dr. W. B. S. Thomas; and a partial skull of the porpoise *Eurhinodelphis*, from the Calvert formation in the Chesapeake Bay region, found by Dr. Carl L. Hubbs, James B. Schultz, and Robert C. Haven.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Exhibition work progressed in all three divisions during the past year, with the installation and relabeling of the paleobotany hall marking probably the most notable advance. The reorganization of this hall, with the restriction of the fossil plant series to a continuous wall case 130 feet long, was concluded by the head curator and James Benn, with the assistance of Miss Jessie G. Beach, who prepared 450 new labels in legible black type averaging 30 words each.

The two exhibits completed and installed in the halls of vertebrate paleontology, in accordance with Mr. Gilmore's plans of the previous year, are striking examples of certain little-known fossil mammals. The preparation of one of these, the oreodon *Merycoidodon culbertsoni*, a cud-chewing swinelike animal found in the Oligocene rocks of Wyoming and purchased some years earlier from G. F. Sternberg, occupied the staff for a portion of 2 years. The other skeleton, a huge ground sloth (*Scelidotherium capellinii*), 9½ feet long and 5 feet high, found in Pleistocene gravel deposits in southern Bolivia and secured in exchange with the American Museum of Natural History, required much of the remaining time. Norman Boss assisted by Arlton C. Murray and Thomas Horne prepared and mounted these exhibits. The staff also made good progress toward the completion

of the next vertebrate specimen for public display, the large dinosaur *Camarasaurus*, which many visitors to the Dallas exposition will recall when it was under preparation there. This specimen, found in Dinosaur National Monument near Jensen, Utah, is being mounted as it occurred in the rock. When completely prepared it will form a single block measuring 10 by 18 feet. The staff also completed a number of smaller and miscellaneous items for the study series.

The work of checking and revising the card catalogs by Mrs. Vera M. Gabbert has been extended through the mammals and is now complete for the fishes, amphibians, reptiles, mammals, and birds. The card catalog of type specimens is now up to date.

The former strictly biological arrangement of the study collections, cutting through geologically associated assemblages, has been found less useful for research purposes and so difficult to maintain that a rearrangement of the fossil mammal study collections was begun during the year. Under the new arrangement large faunal assemblages will be sorted biologically but each kept together as a unit, i. e., Wasatch, Bridger, White River, Hagerman, Cumberland Cave, etc. Miscellaneous collections will be arranged biologically by periods of geological time. This arranging and sorting has been completed for the Paleocene, Eocene, and Oligocene. The Miocene, Pliocene, and Pleistocene collections are for the greater part already segregated according to this plan.

In the division of invertebrate paleontology and paleobotany, Curator Cooper has been entirely occupied in building up the biologic and stratigraphic collections by field work, exchanges, and preparation and study of portions of the backlog. His field work in the southern Appalachians and central Texas produced many choice specimens now installed in the biological series, particularly from Upper Paleozoic formations hitherto poorly represented. Associate Curator Loeblich has supplemented this work by selection of choice material from previously unexamined stratigraphic sets of Lower Paleozoic Ordovician and Silurian from the western and midwestern United States.

Dr. J. Brookes Knight continued his revisionary work on the biological collection of gastropods. He also unpacked and arranged the large collection of Pennsylvanian invertebrates from St. Louis County, Mo., presented by him to the Museum.

Dr. R. W. Brown, paleobotanist of the Geological Survey, carried forward his invaluable work in caring for Mesozoic and Tertiary plants. L. G. Henbest continued his work on the very extensive collection of fossil Foraminifera. His care in packing the extensive Deaderick collection of Foraminifera at Hot Springs, Ark., for shipment to the Museum was a guarantee of its arrival in excellent condition. Mention must be made of the work of Dr. Wilbert Hass, Geological

Survey, in building up the biological series of conodonts. Dr. J. S. Williams and Dr. Helen Duncan have charge of the large Carboniferous and Permian collections of the Geological Survey housed in the Museum.

Dr. Julia A. Gardner, aided by Miss Margaret Contant, assisted greatly by condensing Cenozoic collections in her charge to make room for the type specimens which had been removed from the building during the war.

The stratigraphic collections consumed much time during the year in their reorganization to find space for the many new acquisitions. Both the curator and associate curator were active in this revision and condensation, with the result that a definite arrangement of the whole series by horizons has been established. Associate Curator Loeblich started the large and difficult task of revising, condensing, and organizing the stratigraphic collections of Ordovician and Silurian fossils now comprising about one-third of the stratigraphic series. Dr. Loeblich's efforts here are preparatory to a contemplated condensation of the entire stratigraphic series.

The exchange collections also have been segregated, condensed, built up, and labeled in anticipation of calls for exchanges and gifts to foreign museums. Various labeled lots of Pennsylvanian fossils especially were added to these collections during the year.

Curator Cooper devoted a good part of his time to preparation of fossils, particularly the Mexican collections. The latter were completed and the share belonging to the Geological Institute of Mexico, three large boxes mostly of Permian fossils, was returned. He broke up hundreds of pounds of blocks brought in from the Mississippian rocks of central Texas and prepared a large set of choice specimens for identification and for the biological collection. Considerable time was devoted to the preparation and photography of brachiopods secured from the Ordovician rocks of the southern Appalachians. About 700 photographs were made of these specimens, which will become types when illustrated in his report on the "Chazyan and Related Brachiopoda." In addition, 200 illustrations were completed of Mexican Mississippian and pre-Cambrian species for use in his report on Sonora.

The etching of fossiliferous Permian blocks collected in Texas in 1945 and previous years was continued so this choice collection has been growing daily. Besides these Permian blocks, many small pieces from the Ordovician of the Appalachians and the Carboniferous of Texas were etched with very satisfactory results. Research Associate Knight assisted with this program by dissolving about 15 large blocks containing gastropods.

Dr. Byron N. Cooper, temporary associate curator during part of the year, prepared, by mechanical and chemical means, many trilobite

specimens in his study of Middle Ordovician species from the southern Appalachians. He etched numerous blocks collected by the 1945 field party and recovered new and interesting specimens that will be types destined for the biological collection. He also identified many specimens and revised parts of the trilobite biological collection.

In mineralogy and petrology one new case with interior and substage lighting showing some of the choice gem minerals, aquamarine, tourmaline, and spodumene, was installed in the exhibition hall. An exhibit demonstrating the radioactivity of uranium ore was prepared and located in the hall of economic geology, using a Geiger counter lent by the Geophysical Instrument Co., of Arlington, Va. This instrument registers by its sharp clicking the gamma rays given off by radioactive minerals.

All the American diamonds of the collection were gathered together and installed in a single case, where they show to more advantage than heretofore. Mr. Benn continued changing the monthly exhibit of birthstones and performing other services in connection with the division's exhibition work.

Miss Jessie G. Beach completed the preparation of the exhibition labels in the physical geology hall, as well as those of the mineral collection. She made progress in the same work on the ore collection, making a total of 4,000 of these hand-printed exhibition labels completed during the year.

Miss Theresa Blumenthal continued the card index of new mineral names and changes in the status of mineral species. This catalog furnishes a concise current index of the status and needs of the mineral collection. Mr. Benn has kept up the catalog of mineral localities for a similar purpose.

The study collections in this division are in good condition, completely cataloged, numbered, labeled, and indexed. All the new material of the year, some 1,500 specimens, was incorporated promptly in the collections so that there is no backlog. The exhibition collections are all properly arranged and fully labeled with fresh labels.

The tasks of the grinding and polishing laboratory were carried on as usual by B. O. Reberholt, who reports the following as special accomplishments of the year: Cut, polished, and etched iron and stony meteorites, 29; cut and polished minerals, rocks, and ores, 128; and prepared 608 thin sections of minerals, rocks, ores, and limestone fossils.

INVESTIGATION AND RESEARCH

The head curator, as time permitted, continued his research and identification work on the collections of invertebrate fossils. He forwarded the preparation of several studies on Ordovician Pelmatozoa, Ostracoda, and Bryozoa and made some reduction in the backlog of these classes of animals. The reprocessing of more than 10,000 slides

of Bryozoa, some of them dating back over 50 years and much in need of fresh gum for their future preservation, was a task carried on concurrently with researches on this class of organisms. Plans and preparation for the Smithsonian Centenary celebration occupied a part of the year's last quarter. An article, "The Smithsonian: Pioneer in American Geology," was written for publication in the Centennial issue of *Science*.

Curator G. A. Cooper spent his research time on the two reports, "Geology and Paleontology of the Caborca Area, Sonora" and the "Chazyan and Related Brachiopoda." The manuscript for the latter has been finished, as well as the photography of the specimens preparatory to making up the plates, so that this report should be completed during the coming year. He prepared a manuscript on the Mississippian fossils collected in Sonora, the second largest group of Mexican fossils under study. As the photographs of these specimens and some of the descriptions have been prepared, the work should also be finished in the next fiscal year.

Dr. J. Brookes Knight, research associate, prepared a paper revising the major categories of gastropod classification, which proved necessary when a revision of the peculiar group Bellerophontacea came under critical scrutiny. He also completed manuscripts on new anatomical features of the Bellerophontacea and on a revision of some hitherto unknown Cambrian bellerophontids. Inasmuch as his collection of Permian gastropod specimens is now virtually completely prepared, he has started work on his monograph on the subject. In addition to this research, Dr. Knight devoted time to problems of geological nomenclature in his capacity as chairman of the Joint Committee on Zoological Nomenclature for Paleontology in America.

Dr. Byron N. Cooper, temporary associate curator, during the 4½ months he was stationed in Washington, completed a manuscript and made progress on the illustrations for a monograph on Middle Ordovician trilobites from the southern Appalachians in which he considers about 50 genera.

Research in vertebrate paleontology was limited this year because of the loss of Mr. Gilmore, although three of his papers were published. Dr. C. L. Gazin renewed his investigations and research on the Bridger fauna begun prior to the war, and a manuscript entitled "*Machaeroides eothen* Matthew, the Sabertooth Creodont of the Bridger Eocene" was completed and submitted for publication by the Museum.

Dr. W. F. Foshag proceeded with his studies on the mineral resources of Mexico as a part of the Geological Survey's program on the strategic minerals of Mexico, in collaboration with the Mexican Committee for the Study of the Mineral Resources of Mexico. As time permitted he continued further studies on the Parícutin Volcano,

particularly relating to the geochemistry of the lavas and fumaroles. Dr. Foshag returned to Washington October 8 and has since been occupied in completing his reports.

Associate Curator Henderson's study of meteorites is progressing as time permits. He prepared a series of iron meteorites which was forwarded to Dr. F. A. Paneth in England, who will make the age determinations. Another series was prepared for the Geophysical Laboratory, of Washington, D. C., to carry on similar studies. A portion of a series of lavas from Parícutin was analyzed preliminary to a study of the geochemistry of this volcano. An examination was made of the crystal ball presented by Mrs. Worcester Warner, to determine its possible internal perfection. The laboratory work is finished and the manuscript almost completed for this undertaking, which is in cooperation with the National Bureau of Standards.

Dr. John P. Marble returned to the Museum after a long absence with the Office of Scientific Research and Development and is continuing his studies in our laboratories on the age of rocks.

As in the past, members of the Geological Survey staff working in the Natural History Building continuously consulted Museum invertebrate materials in their work during the year. The division staff and members of the Survey worked intimately together, members of the Museum staff identifying collections brought in by the Geological Survey and members of the latter often accommodating the Museum with identifications in their various specialties. Dr. J. B. Reeside, Jr., chief of the section of paleontology, when not occupied in administrative matters, continued his researches on Mesozoic fossils; Dr. Ralph Imlay was especially engaged with the Jurassic fossils of the western interior of the United States and Alaska; Dr. L. W. Stephenson nearly completed his monograph on the Cretaceous (Lewisville formation) of Texas; Dr. Edwin Kirk made progress with his studies of Devonian and Mississippian crinoids; Dr. R. W. Brown is completing his revision of the Eocene (Wilcox) flora of southern United States; Dr. Wilbert Hass is redescribing type specimens of conodonts belonging to the National Museum and conducting research on conodonts from Devonian and Mississippian rocks; Dr. T. C. Yen, although now living in Philadelphia, frequently visits the Museum to continue his studies of Tertiary fresh-water gastropods; L. G. Henbest continued with his work on Paleozoic Foraminifera; Dr. C. Wythe Cooke's monograph on the Upper Cretaceous echinoids of the United States is progressing; Dr. Julia A. Gardner is revising Part 8 of "The Molluscan Fauna of the Alum Bluff Group of Florida" and Part 2 (Gastropoda) of "Mollusca from the Miocene and Lower Pliocene of Virginia and North Carolina"; Dr. Wendell P. Woodring is working on Pliocene mollusks from the Santa Maria District, Santa Barbara County, Calif.

The usual large number of visitors came directly to the division of mineralogy and petrology for information, and reports were given to 602 persons on gems, minerals, and meteorites, and on other examinations. In addition, the division prepared and sent out 527 letters direct to firms, private parties, and service men who have written in requesting information.

Officially the department was credited with 215 lots of geological materials referred for examination and report, many of these transactions consisting of large numbers of specimens. They were distributed as follows: Mineralogy and petrology, 111; vertebrate paleontology, 12; invertebrate paleontology and paleobotany, 38; and general geology cared for by the head curator, 54. In addition, each division identified numerous lots of specimens sent in directly to the curators or brought in by individuals during their visits to the Museum. Correspondence referred officially to the department for information furnished by the various curators numbered 323.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The three divisions of the department completed the transactions, prepared the material, and distributed a total of 6,682 geological specimens during the year to schools, universities, research students, Government agencies and similar research organizations. These included 4 transfers of 25 specimens, 25 gifts of 1,725 specimens, 21 exchanges of 2,064 specimens, and the loan of 2,868 specimens in 48 transactions. In addition to this, the division of invertebrate paleontology and paleobotany sent 2,218 specimens, principally of Permian fossils, including 42 types, to the Instituto Geológico de México as their share of the material collected during the joint expeditions to Sonora in 1943 and 1944.

During the year 12 loans aggregating 2,083 specimens were prepared and one storage cabinet with six drawers was lent to the Cushman Laboratory for Foraminiferal Research for storage of National Museum Foraminifera.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The early estimates of the number of specimens in the department were only approximate, so that the figures given below necessarily continue to be so. They are computed by taking the estimated figures of last year and adding the difference between the total of those specimens accessioned during the current year and those distributed to other institutions.

Mineralogy and petrology	258,175
Invertebrate paleontology and paleobotany	2,463,700
Vertebrate paleontology	29,821
Total	2,751,696

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DEPARTMENT OF ENGINEERING AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

THE department experienced a subnormal year in the matter of new accessions, attributed in part to the generally unsettled conditions in its field following the cessation of hostilities. The more serious factor, however, was the lack in experienced professional personnel to carry on selective collecting in the rapidly expanding fields of science and industry within the department's scope. By and large the reduced staff performed admirable work. It maintained up-to-date all routine curatorial tasks and supplied all demands of individuals and other Government agencies for the usual information and identification services.

On March 4, 1946, Frank A. Taylor resumed his position of curator, division of engineering, after an absence of over 3 years on war duty. Major Taylor served in the Army's antiaircraft service and participated in the liberation of the Philippines. On June 30, 1946, the department lost through retirement three outstanding members of its professional staff: Dr. Frederick L. Lewton, curator, division of crafts and industries, following 34 years 4 months of service; Dr. A. J. Olmsted, associate curator, section of photography, with 26 years 1 month of service; and Mrs. Elizabeth W. Rosson, assistant curator, section of textiles, after 33 years 3 months of service.

Signal success can be reported in the first public presentation by the division of graphic arts in November 1945 of the Smithsonian Edition of etchings made from the plates of Charles W. Dahlgreen. With little or no advertisement other than newspaper reviews, 128 prints were sold to the close of the fiscal year, yielding over $600 to the Dahlgreen Fund. As reported last year, proceeds from these sales will be used to enhance the graphic-arts collections.

ACCESSIONS

Accessions for the year totaled 142, comprising 1,480 specimens. This represents a material decrease over last year, amounting to 20 percent in accessions and 53 percent in specimens. The disposition of this year's accessions was as follows: Engineering 19 (150 specimens); crafts and industries 57 (904 specimens); graphic arts, including photography, 66 (426 specimens). Of these, the following are worthy of mention:

Engineering.—A group of three Hollerith electromechanical tabulating machines were presented by the International Business Machines Corp. They are one of the series of foundation stones on which this enterprise is built. Dr. Herman Hollerith, a distinguished statistician, was a pioneer inventor of machines for tabulating, sorting, and selecting facts from voluminous compilations of records. Several high-speed precision gauges were presented by the Sheffield Corp., Dayton, Ohio. One of these instruments, a veteran mechanism of World War II, made a total of 29,078,325 measurements on nearly 6,000,000 37-mm. artillery shells, effecting a saving of 4,000 days' work over earlier methods of gauging. The United States Maritime Commission transferred six models of ships representing classes of standard cargo and passenger vessels procured by the Commission during the War. The models, made under the direction of the Commission and checked by its engineers, add to the authentic contemporary models which make up the bulk of the watercraft collection. Ralph E. Cropley continued to add to his gifts of illustrative material related to steamships and other watercraft. A scale model of the Baldwin-Westinghouse, geared, steam-turbine locomotive first introduced in 1945 was made for the collections and presented by the Baldwin Locomotive Works. It is a model of the Pennsylvania Railroad locomotives, class 6200.

In the section of aeronautics, two groups of aircraft models were received. One is a collection of 19 United States Navy types of the period following World War I, transferred by the Bureau of Aeronautics. The other is a collection of aircraft recognition models made by school children early in the World War II period under the direction of a Nation-wide project of the U. S. Office of Education, and transferred to the collections by that agency.

Crafts and industries.—The important textile accessions may be conveniently considered in four groups: Fabric samples mainly for record and study purposes; sewing machines and implements; quilts, coverlets, and other homecrafts; and miscellaneous, including color cards and photographs. In carrying out a long-established policy of acquiring textile samples as a record of the types of fabrics produced from time to time, the Office of the Quartermaster General, Army Service Forces, and the Navy Department, Bureau of Supplies and Accounts, transferred specimens of the various fabrics used by the services in World War II. These were made to conform to standard Government specifications, such as yarn size, thread count, weight per yard, type of finish, and application. In all, 141 different samples were secured. Specimens for the study series, including some exhibit material, were contributed by Tobler, Ernst & Traber; Chicopee Sales Corp.; and Kendall Mills. These comprised a series of Swiss bolting

cloth of several grades and sizes, ranging from 324 to 40,000 meshes per square inch, received from the first-named firm, and 30 specimens of unwoven cotton textile cloths sold under the registered names of "Bonlinn," "Masslinn," and "Webril," which were made by the Chicopee Manufacturing Corp., and the Kendall Mills. The Cotton-Textile Institute, Inc., renewed its valued cooperation of many years by the gift of 27 specimens of cotton fabrics made for the spring and summer trade of 1946. Examples of entirely new fabrics, resulting from demands of the armed services for cloths to meet special needs, have been furnished by the manufacturer, William Skinner & Sons. These include heavy nylon satins and twills having great strength and resistance to wear and wool-backed rayon fabrics. A pictorial, jacquard-figured, silk-and-wool fabric woven in 1876 by the Pacific Mills, Lawrence, Mass., to commemorate the Centennial of the Independence of the United States, was presented by Miss Laura Revere Little.

The greater part of the Museum's collection of sewing machines consists of original models on which the patents were based. The early commercial machines frequently varied from the original patent model and at this time very few of such machines are available. The Museum is very fortunate to have received two additions to this collection from John Whatley and the estate of Miss Lily Morgan Prettyman: One, a Quaker machine patented by William P. Uhlinger, Philadelphia, Pa., in 1858; the other, a Howe machine made in Bridgeport, Conn., about 1874.

Mrs. Elsie McDougall, an ethnologist who has made extensive studies in the textile arts of the Indians of central Mexico, added specimens illustrating Indian silk industry to those contributed by her in 1938. With these the curator has been able to set up two exhibits showing utilization by the Indians of two sources of raw silk: One, the spinning of silk filaments drawn from the large, protective tents made by larvae of a gregarious silk spinner, *Eutachyptera psidii* (Sallé); the other, the hand spinning of pierced cocoons of the ordinary mulberry silkworm after boiling in lime water to remove the gum. The mulberry silkworm was introduced by the Spaniards, and the native Indians were taught sericulture and the reeling of cocoons, but Mrs. McDougall's studies and the specimens which she contributed would indicate that the Indian spun-silk industry antedated the Spanish Conquest.

A number of additions were made to the collections of early homecraft textiles. Included were a seamless, single-weave, jacquard coverlet, having blue-dyed cotton warp and dyed wool weft of red, blue, and olive-green, woven in 1847 by H. and A. Seifert, of Mechanicsburg, Pa., for Daniel Baker, from his daughter, Miss Effie Baker.

The estate of Mrs. Estelle Randall Carlin, through Mrs. Louise C. Westbrook, presented a blue-and-white, cotton-and-wool, double-woven coverlet, showing figures of the snowball order and a pine-tree border, which was made in New York State about 1827. A cotton "Liberty" quilt with eagle design, exemplifying a sewing technique known as reverse applique or inlay work made in Connecticut about 1800 by Hannah Thomson, was lent by Mrs. Whiting Willauer. Prof. Lella R. Gaddis presented a specimen of hemp-wool carpeting from the home of Noah and Mary Gaddis, which was built in 1865 at Rossville, Ind. The hemp was grown on the farm and spun into warp by the grandmother and aunt of the donor; the wool was from a flock of sheep on the farm, and both the green and brick colors were obtained with vegetable dyes.

A number of examples of needlework done in the American home in the last century were added to the collections. Mrs. Grace Chaffee Smith presented a bag, bookmark, friendship album, and sampler, showing pictorial and flower designs, worked with colored wools in satin, tent, and cross stitch on linen canvas and perforated cardboard made by Ursula Chaffee and her daughters. Other specimens were received from Miss Mary Ellen Dashiell, Mrs. Eugene K. Slutz, and Mrs. Helen Pollock Bray. Miss Dashiell's gift was a lace-edged, cotton cambric bolster sham with a vine pattern embroidered in fancy knot stitch giving the effect of braiding, which was made about 1867 by her grandmother; from Mrs. Slutz was received an example of lacework known as darning on net, typical of the 1830's period; and Mrs. Bray gave a beaded bag with colorful flower and landscape pattern, representing an elaborate form of knitting fashionable in the early 1800's.

Specimens added to the sections of chemical industries and agricultural industries included examples of the applications of the newer plastics, contributed by Modern Plastics Inc.; a Babcock milk tester, 1885, received from Sydney Snowden Stabler; and an album of photographs and articles pertaining to Benjamin Holt's contributions to the development of harvesters and caterpillar tractors, presented by O. H. Eccleston.

The most valuable accession received by the division of medicine and public health was the gift of Merck & Co., Inc. It is a specially designed exhibit to illustrate the value of the mineral kingdom's contribution to materia medica. The minerals selected are arsenic, zinc, bismuth, antimony, sulphur, silver, gold, and iron. Each of the two cases composing the exhibit contains samples of the ores, colored transparencies showing how the ores are mined, how a typical medicine from each group is made, and important uses of outstanding medicines made from the element or a compound of it.

Dr. Milton Carpinter Cobey, through the Carpinter family, presented a wooden lemon squeezer and a porcelain feeding cup, both of types used a half century ago. The Abbott Laboratories donated 40 full-color reproductions from a collection of "Paintings of Army Medicine." A case of surgical instruments used in Philadelphia by Dr. James William White (1850–1916) was received as a gift from Dr. Earl S. Johnston. Two surgical instruments used in the practice of dental surgery by Dr. S. J. Cockerille were contributed by Miss Edith Cockerille. Dr. George Tully Vaughan contributed a combination knife-fork implement used by an amputee, William Henry Thelwell, a Confederate soldier. Mrs. A. R. Taylor presented a Jeffreys' oral respirator, an old device for purifying the air which is breathed in through the mouth. Specimens dealing with the early history of osteopathy in Iowa and Minnesota were contributed by Mrs. Marie Stern Walling, through Dr. Riley D. Moore. The Philadelphia Child Health Society donated 12 charts which interpret the latest data on food values for use in the section of public health.

The most scientifically valuable accession received by the section of woods and wood technology comprises 100 woods of British Honduras received as a gift from the Conservator of Forests. The export of forest produce is given as the sole reason for the original settlement of this colony, and the forest department is continuing its effort to have at least all its useful woods classified. Three accessions totaling 44 specimens were recorded as gifts of Maj. William H. Lambert who did some valuable collecting for the Museum while on duty in the Philippine Islands. The woods were obtained largely in the area of the southern tip of Mindoro Island, and are sufficient in quantity to furnish many specimens for distribution and exchange in addition to the specimen incorporated in the collection for comparison and study. Twenty-four specimens of fancy woods of Peru were contributed by Dr. J. G. Sanders. The woods were collected by the donor during clearing operations preparatory to establishing a cinchona plantation at Fundo Sinchono during the early part of World War II.

Graphic arts.—The most important accession again revolved around Charles W. Dahlgreen, who previously had presented the Institution with 76 of his etched and drypointed plates. Mr. Dahlgreen added 18 copper plates, making 94 in all. These plates were deposited by the Smithsonian Institution. He also presented as a gift 14 drypoints and etchings printed from the last-mentioned set of plates, and later made the handsome gift of 126 drypoints and etchings and 1 block print in color, which, added to the 74 prints previously given, constitute a record of his life's work in printmaking unequaled by any other museum. An accession of outstanding importance was the transfer from the Museum's division of birds of 65 Bien chromolithographs after Audubon's "Birds of America," among other prints.

While these prints, made in 1860–62, are not so highly regarded as Havell's earlier aquatints of 1827–38, they nevertheless have their own unique qualities and are in constant demand by collectors.

Dr. Alfred E. Banks, San Diego, Calif., presented the division with a Banks Pocket Braille Writer, Model No. 1, which he invented and constructed in 1940. It is one of three originally built in that year. The International Business Machines Corporation has since undertaken the manufacture of this new device for the blind as a contribution to the handicapped. The machine, which can fit in one's coat pocket, has but six keys and a spacer, produces Braille letters on a narrow paper ribbon, and can be used for taking dictation.

The estate of Robert Underwood Johnson presented the division with the original wood block on which the bookplate of Dr. Johnson was engraved by Timothy Cole. Cole, an American, is generally considered the most skillful of all wood engravers. Thomas Bewick discovered the modern method of engraving on the end-grain in the late eighteenth century, but it remained for American craftsmen of the latter half of the nineteenth century to bring this method to its ultimate refinement. Cole was the only man among these fine reproductive craftsmen to gain international fame for his wizardry with the burin. His original engraved wood blocks are therefore highly prized.

Walter Tittle presented the division with his "Arms Conference Memorial Folio" containing 25 drypoint portraits of statesmen who attended the Conference on the Limitation of Armaments, sometimes called the Washington Conference, which was held in Washington, D. C., from November 1921 to February 1922. A feature of this set is that each print is autographed by the statesman who sat for the portrait. Among the subjects are President Harding, Secretary of State Hughes, Elihu Root, Admiral Beatty, David Lloyd George, Aristide Briand, Earl Balfour, Marshal Joffre, Dr. Sze, and others of prominence. Francis R. Fast gave the division 12 finger paintings, the only specimens of this novel method of painting in the collections. This most ancient and direct of all processes has had a recent revival and Mr. Fast is among the most outstanding of current practitioners, having exhibited in many museums throughout the country. The St. Louis Post-Dispatch contributed as a gift a copy of its rotogravure section of August 12, 1945, containing what it considers to be the first 3-color radio photograph reproduced in rotogravure. The subject is a photograph of President Truman, Prime Minister Attlee, and Marshal Stalin taken at the Potsdam Conference. Karl Schrag presented the division with one of his aquatints, "Solace." The print is unusual in that the subject appears in white line with the remainder of the print in various aquatint tones of gray and black.

Charles B. Wilson presented the division with one of his lithographs, "Freedom's Warrior"; Harry F. Mela donated "Junior Marvel," a self-

filling fountain pen, old style, and two old pen points; Masta Displays gave the division seven examples of its silk-screen work including an unusual example of 3-color half-tone printed by the silk-screen process; Mrs. Jennie Warrick Wright donated an old sanding-box used to dry ink on quill-written manuscripts; and the Smithsonian Institution deposited one etching by Stephen Csoka, "Brooklyn Landscape," the Associate Membership print of the Society of American Etchers for 1945–46.

Items of interest accessioned in the section of photography were of many categories. As early as 1904 Dr. Arthur Korn in Germany was sending photographs by electricity. Dr. Korn brought these machines to the United States in 1939 in his flight to escape Nazi persecution. He died in Jersey City on December 21, 1945, at the age of 75 years, and his widow subsequently presented all the apparatus to the Museum. The equipment is of historical importance in the development of transmission of photographs by wire and radio, since it was the first machine to be publicly acknowledged as successful, although it was not commercially popular. Of equal importance, but a recent development of the late World War II, is a radar camera, a gift from Robert N. Davis. This camera was assembled by him in North Africa and used in both the Italian campaign and in the invasion of southern France. Aided by the radar photographs the aerial bombing became very much more accurate.

A historically important addition was a motion-picture camera and projector, lent by Arthur A. Eddy. This camera and projector were used in an early attempt to produce motion pictures around 1895. The frames were taken spirally on a glass negative and projected from a glass positive printed from this negative. The show would run for about a minute and was designed for amateur use. A Scoville view camera, period of 1885, and an Eastman plate camera of 1887 (this camera was marked a year before the introduction of the No. 1 Kodak, which used roll film) were the fine additions of A. J. Viken to the collection. From Capt. and Mrs. Michael Mahoney there was received as a gift an early 16-mm. Keystone Kinescope, and a Model E–32 projector, with a reel of Charley Chaplin in "Skip the Puddles." This accession is an important addition to the amateur motion-picture cameras and projectors. A new and startling development in three-dimensional photography is the Vectograph which uses polarized light. A single print or transparency suggests relief when viewed with the proper polaroid spectacles. Two prints and three transparencies were added to the collection, the gift of the Polaroid Corp.

Numerous patrons interested in the Museum's historical photographic collections contributed specimens heretofore not represented in the collections. From this source were received, for example, a Tele-Photo Cycle Poco C. camera, a Wynne "Infallible" exposure

meter, an "Ideal" portrait lens and ray filter all of the period of 1896, presented by Miss Sade C. Styron; J. U. Perkins presented an Agfa spark flash lamp and a box of Victor flash powder; and Dr. A. J. Olmsted donated a Cyclone magazine camera holding 12 plates of the period of 1900. Also 24 additions were made during the year to the permanent collection of pictorial photographs.

INSTALLATION AND PRESERVATION OF COLLECTIONS

In the department as a whole only one major installation project was undertaken during the year. This was the construction and decoration of a full-size replica of an eighteenth-century apothecary shop of two rooms and the installation therein of some 1,200 unique, original pieces typical of the equipment, library, and accessories once contained in such an establishment. The project required 13 months to complete, utilizing the skills of the Museum's craftsmen, artists, and preparators working under the direction of Dr. Charles Whitebread, associate curator, division of medicine and public health. This exhibit and the hall containing it were opened to the public on May 15, 1946.

In addition to this major undertaking a wide variety of installation, maintenance, and preservation work was carried on throughout the department by a subprofessional staff of five persons. Typical of these activities are the following: Construction and installation of a diorama illustrating the first iron truss railroad bridge in America; making an inventory of, cleaning, renumbering, and labeling the watch collection of over 500 specimens and arranging it in storage as a reference collection: replacing worn-out negatives of drawings of the Historic American Merchant Marine Survey from which prints are distributed throughout the country and refiling the entire series in an improved way; condemning obsolete exhibition material and making major repairs on historical aircraft and models of watercraft; making 11 new installations of textiles and 56 rearrangements of older textile exhibits; reducing in size, renumbering, and restoring 1,600 wood specimens; fumigating textile and wood specimens against insect attack; and finally, repairing and remounting three traveling exhibits of the graphic arts, including the cutting of 100 new mats.

As in former years, the division of graphic arts held its special monthly exhibitions. These were as follows:

GRAPHIC ARTS

July: Prints and drawings by the Artists' Guild of Washington.
August: American etchings selected from the permanent collection.
September: 15 lithographs and 8 drawings by John Steuart Curry.
October: 19 aquatints and 18 drawings by Lt. J. Jay McVicker, U. S. N. R.

November: 33 prints consisting of aquatints, etchings, soft-ground line engravings and lithographs by Karl Schrag.
December: 42 etchings and drypoints (the Smithsonian Institution Edition) from plates given the Institution by Charles W. Dahlgreen.
January: 29 lithographs by Charles B. Wilson.
February: 28 lithographs and etchings by Bertha Landers.
March: 35 lithographs by Otis Philbrick.
April: 40 prints consisting of soft-ground, aquatints, wood-engravings, monotypes, and lithographs by Edgar Imler.
May: 49 lithographs by Lily S. Converse.
June: 25 drypoint portraits, autographed, of statesmen attending the Disarmament Conference of 1921–22, by Walter Tittle.

PHOTOGRAPHY

July: 25 prints in color by Capt. Dudley Lee.
August: Photographic Society of America. Ninth Annual Salon.
September: 83 prints by George W. Ackerman.
October: 60 prints by Dr. J. O. Fitzgerald.
November: 71 prints by A. Aubrey Bodine.
December: 41 prints by Stuyvesant Peabody.
January: 75 prints by Metropolitan Camera Club Council.
February: 37 prints by John W. Doscher.
March: 83 prints from National High School Salon.
April: 37 prints by Dorothy and Paul K. Pratt.
May: 57 prints by Wood Whitesell.
June: 50 prints by Cecil B. Atwater.

INVESTIGATION AND RESEARCH

Research in the strict sense of the word was not an active function of the department owing to the existing inadequacy of the staff. Study and investigation on the other hand are a daily activity largely to satisfy the demands for information, to determine the acceptability of specimens offered to the Museum, to make identifications and classifications of material, and to be advised of current activities and advancements in the industrial and engineering fields included in the department's scope.

By and large, the department's greatest service is making available and assisting citizens and other Federal agencies in the use of its exhibited and study collections, subject files of illustrative material and original data, and its libraries, in pursuing their studies. It is conservatively estimated that 100 investigators making repeated visits and requiring at least an hour or more of a staff member's time, used these facilities during the year. In addition, an average of 10 consultations a day were held with individuals on specific questions requiring varying amounts of reference work by the staff. Finally, the staff made in the course of the year several hundred identifications of materials from many sources both private and public, which, in many cases, necessitated study and investigation by the staff. Some examples of these several classes of services follow:

A week's study of material on ferry boats by an outside investigator; extended study of Alaskan kyaks by specialists, Transportation Corps, United States Army; examination of collections of homecraft textiles and study of relevant literature by four separate outside investigators; assisting Department of Justice in examination of cabin construction of Wiley Post's Lockheed Vega airplane in connection with patent litigation and identifying cord and rope for the same department in connection with criminal investigations; supplying photographs of Chinese junks to the Office of Strategic Services and furnishing the United Nations Relief and Rehabilitation Administration with information on the methods of extraction of edible oils from seeds and the types of machinery used, especially in China; checking a chronological history of aeronautics for the National Advisory Committee for Aeronautics; identification of 16 lots of prints including one of 300 original but unsigned drawings of old masters of the sixteenth and seventeenth centuries; supplying information on ships, airplanes, and coaches for the production of model kits by model supply companies, especially firms recently established by veterans; identification of woods for the Agricultural Research Administration, the United States Army, the National Lumber Manufacturers Association, and others; and furnishing an officer of the Chinese Army with literature and photographs relevant to public-health exhibitions.

Staff members visited several other institutions during the year. Frank A. Taylor, curator of engineering, studied the new technical exhibitions of the Benjamin Franklin Museum of the Franklin Institute, Philadelphia, Pa. Dr. F. L. Lewton, curator, division of crafts and industries, attended the fall as well as the annual meetings of the Early American Industries Association held in Northampton, Mass., and New York City, respectively. This association deals with the tools and processes of industries and crafts that had their beginnings in America's early days, and opportunity was given at both meetings to examine and study the fine collections of tools and products. Jacob Kainen, assistant curator of graphic arts, visited the print divisions of the Metropolitan Museum of Art and of the New York Public Library and the firm of Masta Displays, one of the outstanding companies in the silk-screen field of the graphic arts. He obtained much valuable information on print filing and storing systems used by the above institutions and acquired as a gift seven fine examples of silk-screen printing from Masta Displays.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Materials distributed from the department consisted of prints of the graphic arts, ship drawings, and miscellaneous photographs of specimens in the collections. The graphic-arts prints numbering

1,575 specimens were contained in seven traveling exhibits, "How Prints Are Made." These were circulated for a total of 17 months in 12 States. The ship drawings were copies of photostat negatives included in the Historic American Merchant Marine Survey maintained by the division of engineering. During the year 551 copies of these negatives were furnished to private purchasers. This brings the total number of copies distributed since the survey was completed in 1938 to 4,862. In the course of the year close to 1,000 photographs of specimens or of other data available in the department were supplied at nominal cost to students, writers, and educators.

NUMBER OF SPECIMENS UNDER DEPARTMENT

Engineering	17,664
Textiles	17,381
Woods and wood technology	13,679
Chemical industries	23,373
Agricultural industries	2,312
Medicine and public health	21,628
Graphic arts, including photography	48,013
Total	144,050

DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

IN the division of history the past year was marked by a number of important additions to the collections and by several noteworthy reinstallations of exhibits. In addition, several unusual matters came up in connection with the division's work, among them being the installation of a special temporary exhibit of naval materials in the foyer of the Natural History Building; the request to Congress for the erection of a special building to house the national historical collections; and the formulation of plans for the installation of special historical exhibits in the Smithsonian, Natural History, and Arts and Industries Buildings in connection with the official observance of the Smithsonian Centennial.

ACCESSIONS

The total number of accessions received during the year was 56, aggregating 3,600 individual specimens. This is about twice as many specimens as were received last year.

To the art collection came an oil portrait of Rear Adm. John L. Davis, United States Navy, made in Lima, Peru, in 1859, when Admiral Davis was a captain—presented to the Museum by Mrs. James A. Wright, who also donated a water-color sketch of the U. S. monitor *Montauk* made by A. C. Stuart in 1865.

The arms collection was increased by a pair of muzzle-loading pistols owned during the Revolutionary War by Col. Joseph Cilley, of the First New Hampshire Regiment. They were presented by Ben Cilley.

Accessions to the costumes collection were noteworthy. Benjamin Harrison McKee and Mary McKee Reisinger, heirs of Mary Harrison McKee, gave to the Museum the dresses that since 1915 have represented the administration of President Benjamin Harrison in the collection of dresses of mistresses of the White House. Mrs. Calvin Coolidge, through Mrs. H. W. Underwood, presented an ostrich-feather fan, a pearl necklace, and a lace and chiffon handkerchief used by Mrs. Coolidge in the White House, 1925–29. These objects were installed in the case with the dress of Mrs. Coolidge presented by her in 1930.

The general collection of American period costumes was enriched by the addition of four dresses, each in an excellent state of preservation and each an unusually fine example of costume of the period it represents. Mrs. Charles C. Osgood gave the Museum a white muslin wedding dress that was worn by her great-grandmother in 1814. The heirs of Rose Jones, through M. G. Gulley, presented the dress worn by Mrs. Jones at her wedding in 1855. A taffeta dress worn by the wife of a senator at the first inaugural ball of President Lincoln in 1861 was given by the Bingham Family through Mrs. E. S. Bartlett and Mrs. S. C. Crow. Mrs. J. G. Locke gave the Museum a wedding dress, veil, and complete set of accessories worn in 1894.

Additional costume accessions include two pairs of children's gloves and a gentleman's white embroidered vest, both of the nineteenth century, given by Miss M. Agnes Neill, and a brown coat of the late nineteenth century presented by Mrs. C. A. Diven.

The collection of military mementos was increased by the addition of a sword and scabbard owned during the War with Mexico by Maj. Gen. Silas Casey, United States Volunteers, and a silver vase presented to him in recognition of his services during that conflict. These objects were donated to the Museum by the estate of Miss Sophie P. Casey through her heirs, Mrs. Elizabeth G. Casey Bispham, Mrs. Sophie Heberton Weiss, and Mrs. Margarette Wyatt Pennoyer. The vase bears the following inscription: "To Capt. Silas Casey, 2 Inf. U.S.A. For his Bravery and Skill at Contreras, Churubusco & other battles of Mexico for his Gallant leading of the Storming Party of Regulars at Chapultepec where he was severely wounded The gift of the Citizens of his Native Town & others, E. Greenwich, R. I. Augst 1848."

The military collection was increased by the receipt of a Japanese parachute found in New Guinea and presented to the Museum by Corp. Robert B. Browne, United States Army. A collection of United States Army insignia of the period of World War II was received from the War Department. A series of large topographic maps of World War II was also received from the War Department.

To the naval collection were added 37 models of United States, French, and British warships of World War II, presented by the H. A. Framburg & Co. A collection of more than 700 pieces of naval insignia of World War II was received from the Navy Department.

The numismatic collection was augmented by the receipt of examples of the United States coins struck at the Denver, Philadelphia, and San Francisco mints in 1945. From the Treasury Department, Bureau of the Mint, also came a copy of the Peary Polar Expedition silver medal bearing on the obverse a portrait of Rear Adm. Robert E.

Peary, United States Navy, in polar costume on a medallion superimposed on the face of a compass that it almost entirely covers; below the portrait appears the legend "Peary Polar Expedition, 1908–1909." On the reverse of the medal is a representation of the United States flag flying to the right between two Eskimo dogs, and below in eight lines is the legend "Presented in the name of Congress in recognition of his efforts and services as a member of the Peary Polar Expedition of 1908–1909 in the field of science and for the cause of polar exploration by aiding in the discovery of the North Pole by Admiral Peary."

The pictorial collections were increased by the gift of a water-color sketch showing the design of the ensign of the English East India Co. in 1776, from Prof. Sir Geoffrey Callender, director of the National Maritime Museum, Greenwich, England, through Leander McCormick-Goodhart.

The philatelic collection was increased by the addition of 1,705 specimens, nearly 400 more than were received last year. Foreign stamps from the Universal Postal Union and new issues of United States stamps, in all numbering 1,649 specimens, were received through the Post Office Department, and 56 specimens came as gifts from individuals. Capt. Bruce A. deBourbon-Conde presented 53 unused German stamps of the regular postal service and the official stamps in use on the eve of the conquest of the Reich. These stamps were captured from the German Government by the Eighteenth Airborne Corps of the United States Army. Col. Hans Lagerloef gave a strip of three Panay Provisional stamps issued in 1899 in the Philippine Islands, as an addition to the large collection of Aguinaldo stamps presented by him last year.

INSTALLATION AND PRESERVATION OF COLLECTIONS

The most notable installation accomplished during the year was that of the third inaugural gown of Mrs. Franklin Delano Roosevelt. This costume was installed in a single case recently constructed for that purpose and placed in the costumes hall. The form on which the dress was installed was made by Andreas J. Andrews, of the staff of the department of anthropology.

A number of costumes of much historic interest were transferred during the year from the west wall cases of the costumes hall to a series of special forms. The use of these forms not only has greatly improved the appearance of the display but also will facilitate the preservation of the costumes from deterioration.

The dress of Mrs. William Howard Taft was repaired by an expert seamstress, Mrs. Alice Watts. The weighted silk chiffon, which was the basic material of the dress, was entirely replaced by a pure-dye silk chiffon procured with the assistance of Julius Garfinckel & Co.

With the repair work and the new material this gown should stand up under exhibition conditions for an unlimited period.

Another important task accomplished during the year was the reinstallation of the furniture collection in the west hall and the addition to it of a small but interesting collection of men's costumes formerly in storage. This furniture now presents a much more effective appearance, and the costumes in the wall cases furnish an excellent background for the furniture in the floor cases. The costumes include both eighteenth and nineteenth century examples, of special interest being some very handsome colonial costumes and also various articles of apparel owned by Thomas Jefferson during the early part of the nineteenth century. A costume of an unusual type included in this series is a judicial robe worn by John Jay, the first Chief Justice of the United States.

Some improvement was made in the facilities for the storage of the study collections of coins and medals by the renovation of a small storage room formerly part of the historical suite and the installation of a special alarm on the door of this room. At the same time a large iron safe and a series of six quarter-unit storage cases, each fitted with drawers divided into compartments suited for storing coins and medals, were installed in this room. This equipment will greatly facilitate the storage of decorations, medals, and coins.

The problem of space for the installation and preservation of the historical collections continues to be an acute one. There is little or no space left in the building for expansion, either for the exhibition material or for the study series in storage. The space available is divided into a number of small units and is exposed to much dust and dirt from which valuable and often irreplaceable specimens can be protected only through the use of airtight cases, which at the present time are not available. Since the primary object of all historical exhibition series is to tell the story of the development of some phase of local or national history, and the primary object of all storage series is to preserve historical materials from deterioration, adequate space is of paramount importance and is essential to the proper functioning of any historical museum unit. Among the new buildings planned for the Smithsonian Institution is one to be devoted to American history, and only when that is provided will the Museum's invaluable historical mementos and archives be displayed and protected as they should be.

INVESTIGATION AND RESEARCH

The various members of the staff have each performed important processes in connection with research and investigation in their respective fields. The curator added a valuable series of notes concerning coins, medals, and insignia to similar series assembled by him in recent

years. The associate curator, Capt. Charles Carey, has done likewise in connection with the history of arms and uniforms. Miss Margaret Brown, scientific aide, assembled notes on the history of American costume, which constitute an admirable basis for a bulletin on this subject.

Members of the staff at various times assisted the War, Navy, Treasury, and Post Office Departments in connection with materials of military, naval, numismatic, or philatelic interest. A great deal of information was furnished on these subjects to correspondents and to those visiting the division in person. Lots of specimens received for examination and report during the year numbered 50.

NUMBER OF SPECIMENS UNDER DIVISION

Art	1,644
Civil	16,307
Military	28,231
Naval	3,103
Numismatic	51,039
Philatelic	417,513
Pictorial	16,928
Total	534,765

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ACCESSIONS DURING THE FISCAL YEAR 1945–46

(Except when otherwise indicated, the specimens were presented or were transferred, in accordance with law, by Bureaus of the Government)

ABBOT, Dr. CHARLES G., Washington, D. C.: 1 Bromoil print by Rudolf Eickemyer (170828); 2,856 beetles collected at Tyrone, N. Mex. (172534).

ABBOTT, Mrs. ISABELLA, Honolulu, Hawaii: 26 bottles of sediment containing diatoms (170811).

ABBOTT, Lt. R. TUCKER. (See under Harvard University, Museum of Comparative Zoology.)

ABBOTT FUND, W. L., Smithsonian Institution: 1,357 bird skins; 4 nests and 42 mollusks collected by M. A. Carriker, Jr. (169299).

ABBOTT LABORATORIES, Chicago, Ill.: 40 full-color reproductions from the Abbott Collection "Paintings of Army Medicine" (170865).

ABRAMOWITZ, SEYMOUR A., Newark, N. J.: (Through Maj. H. A. MacCord) A specimen of marcasite from near Mourmelon-LeGrand, 16 miles east of Reims, France (171325).

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, Philadelphia, Pa.: 43 plants, mostly from South America (172679, exchange).

ACKERMAN, GEORGE W., Washington, D. C.: 83 pictorial photographs for special exhibition during September 1945 (171156, loan).

ACUNA, Ing. JULIAN. (See under Estación Experimental Agronómica.)

ADDIS, C. J., Uvalde, Tex.: 4 slides of flies collected in Uvalde (168715).

AGRICULTURE, U. S. DEPARTMENT OF, Washington, D. C.: 14 plants from Puerto Rico (172185).

Bureau of Entomology and Plant Quarantine: 1 mollusk from Venezuela, 15 amphibods from Leleboon Islands, and 1 isopod (170968); 12 mollusks from Mexico and Puerto Rico (171028); 28 land and fresh-water mollusks and 2 leeches from Senegal, West Africa, and 4 isopods from Mexico (171290); 29 fishes, mollusks, reptiles, and marine invertebrates (171366); 1 mollusk from Jamaica (171441); 6 mollusks from Oahu, Hawaii (171568); 8 mollusks from Alaska (171733); (through Dr. H. K. Townes) 67 land and fresh-water mollusks from Maryland and Pennsylvania (171792); 12 mollusks from Veracruz, Mexico (171809); 9 mollusks from Alaska and England (172333); 2 mollusks from Bermuda (172381); 2 mollusks from Brazil and England (172632); 1 mollusk, 9 isopods, and 2 amphipods (172809); 1 mollusk from Guatemala and 5 isopods (173072); 11 mollusks and 1 crustacean from Holland, Puerto Rico, and Hawaii (173295); 140,000 miscellaneous insects, largely estimated, collected by men in the armed services and including also insects retained during the year from specimens sent for identification (173375).

Office of Foreign Agricultural Relations: (Through Claud L. Horn) Herbarium specimen and 5 photographs of plants from Peru (170731); (through Jane Roller) 1 plant from Bolivia (173221).

Forest Service: 1 plant from New Mexico (171646); (through Doris W. Hays) 2 plants from North Carolina (171794); 5 plants from Ecuador (173112).

Bureau of Plant Industry, Soils, and Agricultural Engineering: 1 plant from Brazil (171453); (through Carl O. Grassl) 46 economic grasses (171562); (through B. Y. Morrison) 84 photographs, largely habitat views of Chinese plants, by Dr. Joseph F. Rock (171725); (through Dr. Rogers McVaugh) 2 plants from Texas (171951); 31 plants collected by Dr. R. J. Seibert in Peru (172529); 6 plants from Brazil (173271).

AGUAYO, Dr. C. G., Habana, Cuba: 14 paratypes and topotypes of Cuban operculate land mollusks and a rare land shell (170716, 172449).

ALCORN, J. R. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

ALDRICH, F. R., Balboa, Calif.: 2 mollusks (172981).

ALDRICH, Dr. JOHN W. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

ALEXANDER, Dr. CHARLES P., Amherst, Mass.: 39 flies, including 2 slides and 34 paratypes (161105, exchange); 167 insects, mostly flies, collected by Lerio Gomes (171197); approximately 35 tipulid flies (172127, exchange).

ALLARD, H. A., Arlington, Va.: Collection of 5,000 plants from the Dominican Republic (171248, collected for the Museum); 37 plants from Virginia (171963); 625 plants from West Virginia (171333).

ALLEN, Ross, Ocala, Fla.: 1 rainbow snake from Silver Springs, Fla. (170979).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y: 4 casts of fossil reptiles (170951, exchange); (through Charles M. Bogert) 13 fishes from Arnett Canyon, Pinal County, Ariz., collected by Mr. Bogert in 1945 (171421); 1 beetle (173393, exchange).

AMERICAN NUMISMATIC ASSOCIATION, New York, N. Y.; (through Martin F. Kortjohn) 69 coins of Australia, Austria, Belgium, Bolivia, Brazil, Ceylon, Chile, Colombia, Cuba, Curaçao, Czechoslovakia, Finland, France, Liechtenstein, Mexico, Netherlands, Newfoundland, Saudi Arabia, Serbia, Switzerland, Union of South Africa, Travancore, and Uruguay (170770, loan).

AMPHLETT, A. W., Ball Ground, Ga.: 2 specimens of uranophane and 1 specimen of mica from Amphlett Mica mine, Ball Ground, Cherokee County, Ga. (171296).

ANDERSON, Dr. CHARLES R.: (See under The Rockefeller Foundation and the Carlos Findlay Laboratory.)

ANDERSON, Lt. Col. GAYLORD W. (See under War Department, Office of the Surgeon General.)

ANDRE, Dr. FLOYD, Washington, D. C.: 277 bugs, representing 73 species and including 2 paratypes (171739).

ÁNGEL, Brother HILARINO. (See under Colegio de la Salle.)

ANONYMOUS: 2 bird skins (170752, found in collection without number); 1 stereo portrait, on albumen paper, standing figure of a lady (171122); German flag and decoration of World War II, and 5 military arm bands of the same period (171133).

APOLINAR-MARÍA, Rev. Brother, Bogotá, Colombia: 7 plants from Colombia (168655).

ARCHBOLD BIOLOGICAL STATION, Lake Placid, Fla.: (Through L. J. Brass) 73 grasses from Florida (171065, 171755, 172524).

ARIZONA, UNIVERSITY OF, Tucson, Ariz.: (Through Prof. Frank W. Gould) 107 plants from Arizona (170732, exchange); (through Prof. Walter S. Phillips) 37 ferns from Arizona (170784, 171872, exchange); 3 ferns from Arizona (170982, exchange); (through Prof. Robert A. Darrow) 112 grasses from Arizona (172574, exchange).

ARNOLD, Dr. GEORGE. (See under National Museum of Southern Rhodesia.)

ARRIETA M., Ing. DARIO L. (See under Mexican Government, Department of Agriculture.)

ARTISTS' GUILD OF WASHINGTON, Washington, D. C.: 34 drawings and prints by members of the Artists' Guild of Washington, for special exhibition during July 1945 (170773, loan).

ARWIDSSON, Dr. TH. (See under Naturhistoriska Riksmuseet.)

ATWATER, CECIL B., Newtonville, Mass.: 50 pictorial photographs for special exhibition, June 17 to 30, 1946 (173389, loan).

AUSTRALIAN GOVERNMENT, *Council for Scientific and Industrial Research*, Canberra City, Australia: 89 grasses from Australia (171064, exchange).

BAARDSE, JOHN, Washington, D. C.: 5 cultivated plants (171499).

BAHOVEC, FRED, Baranof, Alaska: 20 mollusks, 2 starfishes, and 2 lots of other invertebrates (171047).

BAILEY, Lt. Col. F. M., Norfolk, England: 33 identified butterflies from Tibet (173170).

BAILEY HORTORIUM, Ithaca, N. Y.: 1 cultivated plant from Uruguay; 5 plants (171263, 172998, exchange).

BAILEY, Dr. REEVE M. (See under University of Michigan. Museum of Zoology.)

BAKER, EFFIE, Baltimore, Md.: Seamless, single-weave jacquard coverlet, woven in 1847 by H. and A. Seifert, Cumberland County, Pa., for Daniel Baker (1821–1905), of Church Town, Pa. (170812).

BAKER, R. H. (See under Navy Department, Naval Medical Research Unit No. 2.)

BALDWIN LOCOMOTIVE WORKS, Philadelphia, Pa.: (Through M. K. Wright) Model of Baldwin-Westinghouse geared steam-turbine locomotive (172174).

BANKNOTE ENGRAVERS GUILD LOCAL NO. 32, INTERNATIONAL PLATE PRINTERS, DIE STAMPERS, AND ENGRAVERS UNION OF NORTH AMERICA, Washington, D. C.: 1 souvenir sheet of stamps for use in connection with designing the Smithsonian Institution Centennial Stamp (173286).

BANKS, Dr. ALFRED E., San Diego, Calif.: 1 Banks Pocket Braille Writer, model #1 (170810).

BANNER, A. H., Bellingham, Wash.: 652 crustaceans and a number of mollusks (172818).

BANNON, ARTHUR H., Portsmouth, Ohio: 5 bear skins collected by donor in British Columbia and Yukon (157753).

BARBER, HERBERT S., Washington, D. C.: 1 plant from Great Falls, Va. (170724).

BARBOSA, Dr. FREDERICO, Pernambuco, Brazil: 71 specimens of mosquito material, representing 5 species, all from Brazil (173380).

BARKLEY, Dr. FRED. (See under University of Texas.)

BARNES, G. L., Fort Mason, Calif.: A collection of 76 ethnological specimens from the northeast coast of New Guinea (170765).

BARNES, RALPH C. (See under Federal Security Agency, U. S. Public Health Service.)

BARNÉS, VENTURA, Jr., Mayagüez, Puerto Rico: 1 skin of a Puerto Rican broad-winged hawk (the second known specimen of the form) (172355).

BARROS V., Prof. ERNESTO, Concepción, Chile: 200 grasses from Chile (172000).

BARTLETT, Mrs. E. S., Detroit, Mich. (See under the Bingham Family.)

BARTLEY, FLOYD, Circleville, Ohio: 46 plants from Ohio (171708).

BARTON, Lt. OTIS, New York, N. Y.: 15 fishes from Tanamerha Bay, New Guinea, collected by the donor during November-December 1944 (171033).

BARTOS, Lt. WILLIAM A., F. P. O., San Francisco, Calif.: 9 shrimps, 7 crabs, 2 fishes (170517).

BARTSCH, Dr. PAUL, Washington, D. C.: 1 bat, 2 white-footed mice, 1 red-eyed vireo, 1 gray fox (170771, 170913, 170937, 173276); 1 black-headed cacique (171741).

BASSLER, Dr. R. S., Washington, D. C.: 1 5-negative panorama photograph of the City of Washington from Smithsonian Tower (173115).

BAUMANN, Mrs. CHRISTOPHER C., Aurora, Ill.: 1 American pressed-glass honey dish in the dahlia pattern (171581).

BAYER, Sgt. FREDERICK M., A. P. O., San Francisco, Calif.: 7 plants from Luzón and 11 from Okinawa (170838, 171354, 171632).

BAYER, TED, Coral Gables, Fla.: 2 reptiles from Okinawa collected by donor and Gilbert Neurohr (172662).

BEALS, ROBERT V., San Francisco, Calif.: (Through Mrs. Doris H. Blake) 128 marine shells from Milne Bay, New Guinea (171411).

BEAMER, Prof. R. H., Lawrence, Kans.: 9 bugs (paratypes) (169929, exchange). (See also under University of Kansas.)

BEARD, JOHN, Forestry Division, Grenada, B. W. I.: 7 plants from British West Indies (171853).

BEATTY, HARRY A., Christiansted, St. Croix, Virgin Islands: Bird bones and mammal bones from an archeological site at "River Settlement," Virgin Islands; also small collection of miscellaneous insects and 4 vials of parasitic worms from Virgin Islands (165402, 169958).

BEETLE, Dr. ALAN A., Davis, Calif.: 21 grasses from California (172263). (See also under University of California, College of Agriculture.)

BELASCO, DAVID M., F. P. O., San Francisco, Calif.: 155 minute marine mollusks and 1 vial of Foraminifera from New Hebrides (170786).

BELKIN, JOHN N., Ithaca, N. Y.: 153 pinned adult mosquitoes from Japan (172476).

BENEDICT, JAMES E., Silver Spring, Md.: A fern from Maryland (172716).

BENJAMIN, Lt. (jg) D. M., Minneapolis, Minn.: 27 mosquitoes, representing 3 species (171805).

BENNETT, Dr. A. B. (See under Lt. Comdr. Green Clay Goodloe.)

BENNETT, Maj. HARRY J., A. P. O., San Francisco, Calif.: 884 mollusks from the Kabakan area, Mindanao, Philippines (170954).

BENNETT, Lt. LOGAN J., F. P. O., San Francisco, Calif.: 29 birds from Admiralty Islands (171251).

BENSON, Dr. LYMAN, Claremont, Calif.: 128 plants from the western United States (170826, exchange).

BENTLEY, Col. WILLIAM C., Maxwell Field, Ala.: Court dress of an Arab woman of Xauen, Spanish Morocco, acquired by the donor in Morocco in 1932 (173207).

BEQUAERT, Dr. JOSEPH. (See under Harvard University, Museum of Comparative Zoology.)

BERGER, Mrs. TILLIE H., Washington, D. C.: 1 cultivated plant and 3 plants from Washington, D. C. (171084, 172179).

BERKS COUNTY, HISTORICAL SOCIETY OF, Reading, Pa.: (Through G. W. Clemens) Decorated stove plate cast in 1763 at the Colebrookdale Furnace, Berks County, Pa. (172890).

BERN, Lt. HOWARD A. (See under Lt. Merle F. Hansen.)

BERRY, Dr. S. STILLMAN, Redlands, Calif.: 12 fossil mollusks (paratypes) (171243, exchange).

BIBBY, Lt. (jg) F. F., F. P. O., San Francisco, Calif.: 257 mollusks from the Philippines (170739, 171120).

BING, JOSEPH M., New York, N. Y. (See under Photo Utilities, Inc.)

BINGHAM FAMILY: (Through Mrs. E. S. Bartlett and Mrs. S. C. Crow, Detroit, Mich.) A silk taffeta dress worn by Mrs. Kinsley Bingham at the inaugural ball on the occasion of the first inauguration of President Lincoln (172192).

BISPHAM, Mrs. ELIZABETH G. CASEY. (See under Estate of Sophie P. Casey.)

BLACK, GEORGE, Oceanside, Calif.: 41 grasses from Brazil (172979).

BLACKWELDER, Dr. ELIOT, Stanford University, Calif.: Samples of silica debris, explosion debris, and quartz flour from Meteor Crater near Winslow, Ariz. (173374).

BLAKE, Mrs. DORIS H., Washington, D. C.: 349 beetles collected by the donor in Florida (173050). (See also under Robert V. Beals.)

BODINE, A. AUBREY, Baltimore, Md.: 71 pictorial photographs for special exhibition during November 1945 (171665, loan).

BOGEN, Lt. Comdr. EMIL, San Francisco, Calif.: 66 insects and centipedes; worms, 1 octopus; 2 snakes, 1 lizard, and 1 crocodile; 1 bat from Manus and 6 plants from the Admiralty Islands (171262, 171511, 171745).

BOGERT, CHARLES M. (See under American Museum of Natural History.)

BOHANNAN, Lt. C. T. R., Washington, D. C.: Melanesian pottery, bows and arrows, wooden bowls and drums, and other personal and household articles from northeast (Rai) coast of New Guinea, collected by donor in 1943 and 1944 (173384).

BOHART, Lt. G. E., Berkeley, Calif.: 2 paratypes of flies and 19 specimens of flies, including holotype, allotypes, and paratypes (173376, 173378). (See also under Navy Department, Medical Research Unit No. 2.)

BOHART, Lt. G. E., and GRESSITT, Lt. (jg) J. L., F. P. O., San Francisco, Calif.: Approximately 10,000 miscellaneous insects from the Island of Guam (171017). (See also under Navy Department, Medical Research Unit No. 2.)

BOHART, Lt. R. M., F. P. O., San Francisco, Calif.: 20 mosquitoes (171037). (See also under Navy Department, Medical Research Unit No. 2.)

BOTTIMER, L. J., College Park, Md.: 18 mollusks from College Park (172615); specimen of grass from New Jersey (172717).

BOUDREAUX, H. BRUCE, Baton Rouge, La.: 1 slide of aphid (172780).

BOURGEOIS, MARIE E., Mixcoac, D. F.: 4,240 mollusks from Mexico (170673, 170803, 171649).

BOURQUIN, Dr. FERNANDO, Buenos Aires, Argentina: 30 specimens of Lepidoptera from South America (170632, 171318).

BOWER, W. J. (See under Mrs. Mary J. Coles).

BRANSON, Prof. CARL C., Jackson, Ala.: Internal mold of an echinoderm from the Eocene of Alabama (171137); 14 echinoids from the Tertiary rocks of Alabama (171528); fossil crinoid (172124); approximately 180 gastropods from the Pennsylvanian and Permian of Tularosa, N. Mex., and 1 Jackson fossil crab from Choctaw County, Ala. (172383); 50 Upper Devonian brachiopods from the vicinity of Alamogordo, N. Mex. (173074).

BRASS, L. J. (See under Archbold Biological Station.)

BRAY, Mrs. HELEN POLLOCK, Arlington, Va.: Beaded bag with colorful flower and landscape pattern, representing an elaborate form of knitting fashionable in the early 1800's, which belonged to the donor's great-great-grandmother, who settled in Kittanning, Pa., in 1790 (170960).

BRECKINRIDGE, SOPHONISBA P., Chicago, Ill.: 2 silver beakers, middle 19th century (172945).

BRENNER PHOTO CO., Washington, D. C.: 1 Victor 16-mm. cine projector, very early model (170838); Eastman 1–A Kodak of 1898 (172066); 1 Conley shutter of about 1900 and 1 "Espi" exposure table (German) for daylight and flashlight (173390).

BRIMLEY, Dr. C. S., Raleigh, N. C. (Through Mrs. R. C. Simpson) 4 fishes: 2 specimens from Lake Waccamau, N. C., and 2 from New Guinea (172142).

BRISCOE, Capt. M. S., Washington, D. C.: 42 reptiles and amphibians, 3 fishes, some mollusks, crabs, and insects, and millipedes from Harbel, Liberia (172135).

BRISTER, W. C. (See under Institute of Inter-American Affairs.)

BRITISH GOVERNMENT, *British Museum (Natural History)*, London, England: (Through Dr. G. E. Nixon) 177 specimens of Hymenoptera comprising 40 species of *Spathius* and *Apanteles* (145821, exchange); 21 ferns from Jamaica (156802); (through Dr. J. P. Harding) 10 parasitic copepods from British waters (171390, exchange).

Royal Botanic Gardens, Kew, Surrey, England: 219 plants, mostly from Colombia and Venezuela (171983, exchange).

BRITISH HONDURAS, *Conservator of Forests*, Belize, British Honduras: 100 specimens of the woods of British Honduras (172062).

BRODIE, D. A., Gore, Va.: 9 crinoids and 2 brachiopods from the Oriskany sandstone of the Devonian period in the vicinity of Gore (171342).

BROOKS, A. R. (See under Canadian Government, Department of Agriculture.)

BROOKS, Prof. FRANK G., Mount Vernon, Iowa: 77 fresh-water snails from Carroll Lake, Oneida County, Wis. (171032).

BROWN, Capt. FRANK R., A. P. O., New York, N. Y.: 7 birds skins from Tunisia and Italy (170845).

BROWN, Lt. KIMBROUGH S., A. P. O., New York, N. Y.: 14 German aircraft instruments of the period of World War II (171140).

BROWN, SAMUEL K., Eustis, Fla.: 7 snakes, 1 frog, from Lake County, Fla. (172737).

BROWNE, Corp. ROBERT B.: (Through Lt. George F. Shaw) A Japanese parachute captured in New Guinea during World War II (172429).

BRUNER, Dr. S. C., Santiago de las Vegas, Cuba: 2 flies from Cuba (171382); 6 specimens of Hemiptera (173204); 39 beetles from Cuba (173392).

BÜES, C., Quillabamba-La Convención, Peru.: 79 ferns from Peru (171311).

BURCH, JOHN Q., Los Angeles, Calif.: 1 marine mollusk from Newport Bay, Calif. (170717).

BURCH, Prof. PAUL R., Radford, Va.: 855 land and fresh-water shells and 4 insects from Virginia (163330, 170997).

BURCHAM, Capt. L. T., Berkeley, Calif.: 30 plants from Okinawa (170891).

BURKART, Dr. ARTURO. (See under Instituto de Botánica Darwinión.)

BURKE, Mrs. J. LEO, Richmond Heights, Mo.; 10 Marine Air Corps uniforms of the period of World War II (172109).

BURKS, Capt. BERNARD D., A. P. O., New York, N. Y.: 10 flies (166511).

BURT, Prof. CHARLES E., Topeka, Kans.: 3 cacti from Oklahoma (171852); (through Roger Conant) 1 soft-shelled turtle (paratype) from Topeka (172821).

BUSS, IRVEN O., Menomonie, Wis.: 5 bird skins (172358).

BUTLER UNIVERSITY, Indianapolis, Ind.: (Through Dr. J. E. Potzger) 8 grasses from Indiana (171393, exchange).

BUXTON, Prof. P. A. (See under London School of Hygiene and Tropical Medicine.)

CABANILLAS, Capt. J. M., Richmond, Va.: 3 earthenware vessels from a grave near the town of Concepción, Chiriqui District, Panama (171150, exchange); 5 crabs (171203).

CABRERA, Dr. ÁNGEL L. (See under Instituto del Museo.)

CALCUTTA, INDIA, ROYAL BOTANIC GARDEN, Sibpur, India; 224 plants collected in Burma by Jack McMillen (170772, exchange).

CALDWELL, Dr. J. S., Circleville, Ohio: 2 bugs (173065).

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 127 grasses from California (170980, 172573, 173274, exchange); (through John Thomas Howell) 25 grasses from California (171784, exchange); 7 grasses from Mexico (172514, exchange).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.: (Through Dr. E. Gorton Linsley) A small collection of beetle larvae representing 4 species (163466); a collection of miscellaneous invertebrates (170553); 141 plants from the western United States (170754, exchange).

College of Agriculture, Davis, Calif.: (Through Dr. Alan A. Beetle) 1 grass from California (171950).

Scripps Institution of Oceanography, La Jolla, Calif.: (Through Dr. Carl L. Hubbs) 704 fishes, copepods, and other parasites from California and Lower California (172478); (through Dr. Carl L. Hubbs) 2 fishes from Dos Palmas Spring, Riverside County, Calif., caught by Elmer Berry (172681).

CALLAN, Dr. E. McC., Trinidad, B. W. I.: 5 insects in 2 species, 1 of them represented by 3 paratypes (170984).

CALLENDER, Prof. Sir GEOFFREY, Greenwich, England: (Through Leander McCormick-Goodhart) Sketch showing the design of the ensign of the

English East India Co. in 1776 (172648).

CANADIAN GOVERNMENT, *Department of Agriculture, Division of Entomology*, Ottawa, Ontario: (Through A. R. Brooks) 2 flies, paratypes (171496).

Department of Agriculture, Dominion Entomological Laboratory, Vernon, British Columbia: (Through Hugh B. Leech) 12 beetles, including holotype and paratype of 1 species and paratypes of 2 others (171860).

Department of Agriculture, Division of Botany, Ottawa, Ontario: (Through James H. Soper) 402 plants from southwestern Alberta (172296, exchange).

Department of Agriculture, Experiment Station, Lethbridge, Alberta: 14 grasses from Canada (172525).

Geological Survey, Ottawa, Ontario: (Through Dr. Alice E. Wilson) 19 casts of type specimens of brachiopods from Ordovician rocks in Canada (170468, exchange).

Department of Mines and Resources, National Museum of Canada, Ottawa, Ontario: 872 Canadian mosses (172253, exchange).

Royal Ontario Museum of Zoology, Toronto, Ontario: (Through Dr. F. A. Urquhart) 1 termite nest taken in Africa (171861).

CANBY, Lt. JOEL S., Denver, Colo.: Archeological material, presumably of Chamorro origin, from various sites on Tinian Island, Marianas Group, Pacific Ocean (171944).

CANFIELD FUND, Smithsonian Institution: 1 etched beryl, weight 201 grams, from Minas Gerais, Brazil (171801); collection of Franklin, N. J., minerals (172871); specimen of stibiotantalite from near Alto Legonha, Mozambique (172882); 3 specimens of sulphur from Sulphur, Nev. (172912); specimen of anhydrite from Franklin Furnace, N. J. (173265).

CARLANDER, KENNETH D., A. P. O., New York, N. Y.: Collection of miscellaneous insects, plants, mollusks, and reptiles taken by donor in the Panagarh area, about 30 miles east of Asansol, Bengal, India, in 1945 (171962).

CARLIN, Mrs. ESTELLE RANDALL (deceased), Fairfax County, Va.: (Through Mrs. Louise C. Westbrook) Blue-and-white, cotton-and-wool, double-woven coverlet, with geometric pattern, which was made in New York State about 1827 (172485).

CARLSON, Corp. ROBERT, San Francisco, Calif.: 178 mollusks from Treasury Island, North Solomons (171830).

CARLSTON, Lt. E. F. (See under Navy Department, Bureau of Ships.)

CARNEGIE MUSEUM, Pittsburgh, Pa.: (Through M. Graham Netting) 64 fishes collected in Arizona in 1945 by Dr. Arthur C. Twomey (171876).

CAROW, Lt. JOHN, Asheville, N. C.: 46 plants from Okinawa (172078).

CARPENTER, Lt. G. R., Washington, D. C.: 1 micrometer, 1 inch outside, marked "Victor S. M. (Sewing Machine) Company, Middletown, Connecticut, U. S. A.," used by the donor's father (170871).

CARPENTER, MATHILDA M., Washington, D. C.: 2 United States naval tokens, one made in 1904 and the other in 1912 (171980).

CARPINTER FAMILY. (See under Dr. Milton Carpinter Cobey.)

CARTWRIGHT, O. L., Clemson College, S. C.: 4 beetles (169504).

CASEY, ESTATE OF SOPHIE P., Washington, D. C.: (Through Mrs. Elizabeth G. Casey Bispham, Mrs. Sophie Heberton Weiss, and Mrs. Margarette Wyatt Pennoyer) Sword, uniform belt, and silver vase owned by Maj. Gen. Silas Casey, U. S. Volunteers, 2 photographs, 2 periodicals, 9 leaflets, and also 3 Indian bows and a prehistoric animal's tooth (171620).

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C.: (Through Father Hugh O'Neill) 25 mosses from Hispaniola (171327, exchange).

CAUSEY, Dr. O. R. (See under Institute of Inter-American Affairs.)

CEYLON, NATIONAL MUSEUMS OF, Pelmadulla, Ceylon: (Through Dr. P. Deraniyagala) 8 rats from Ceylon (172207).

CHAMBERLAIN FUND, FRANCES LEA, Smithsonian Institution: 39 lots of land shells of the Lord Calvert collection (160196); collection of alexandrites from Russia (173202).

CHAMBERS, Miss C. M., Washington, D. C.: 1 cedar waxwing (173218).

CHANDLER, B. A., Westmoreland Hills, Md.: 3 cultivated plants (172680).

CHAPIN, Dr. E. A., Washington, D. C.: 2 spiders, type and paratype, from Florida (170718); approximately 500 fresh-water mollusks from the Rappahannock River, Va. (170977); 40 miscellaneous insects and spiders and a small collection of mollusks taken from the Rappahannock River near Remington, Va. (171052); about 150 spiders and insects and a collection of mollusks made at Hope House, Easton, Talbot County, Md. (171349).

CHARDON, Dr. CARLOS E. (See under University of Puerto Rico, Institute of Tropical Agriculture.)

CHASE, Mrs. AGNES, Washington, D. C.: 89 grasses (170753, 172252); 7 grasses collected in Venezuela by Miss V. E. Rudd (171117).

CHASE, VIRGINIUS H., Peoria Heights, Ill.: 500 specimens of fossil Foraminifera from the Pennsylvanian of Peoria County, Ill. (171138); 18 plants from Maryland (172016); 130 plants, mostly from Illinois (172459); 200 mosses from Missouri (173220).

CHIANG, HUAI-CHANG, St. Paul, Minn.: A collection of insects, parasites of fall cankerworm (172462).

CHICAGO NATURAL HISTORY MUSEUM, Chicago, Ill.: 669 plants collected in Guatemala by Dr. Julian A. Steyermark; 54 plants from Adak Island, Alaska, and 1,790 plants, mainly from Guatemala (170733, 171042, 172254, exchange).

CHICOPEE SALES CORP., New York, N. Y.: 5 study samples of unwoven cotton sheeting, 4 laminated "Masslinn" of different types, and 5 "Bonlinn" of bleached absorbent cotton in stiff, heavy weight (172161, 172332).

CHOU, Dr. RUTH CHEN-YING, Washington, D. C.: 10 plants from Virginia (170938).

CILLEY, BEN, Lake Worth, Fla.: Pair of pistols owned during the Revolutionary War by Col. Joseph Cilley, First New Hampshire Regiment (163034).

CLARK, CLARENCE F., St. Marys, Ohio: 18 shrimps from Ohio (170946).

CLARK, Mrs. EFFIE M., Yuba City, Calif.: About 1,070 fossil shells (170621).

CLARK, R. L., Burke, Va.: 1 shrew collected by donor near Burke (172059).

CLEMENS, G. W. (See under Historical Society of Berks County.)

CLEMENT, Brother, Santiago, Cuba: 41 plants from Cuba (171144).

CLEVELAND MUSEUM OF NATURAL HISTORY, Cleveland, Ohio: 17 ferns (103731).

CLOVER, Dr. ELZADA U., Madison, Wis.: 7 grasses from Arizona (171282).

COBEY, Dr. MILTON CARPINTER, Washington, D. C.: (Through the Carpinter Family) 1 wooden lemon squeezer and a porcelain feeding cup, representing types in use 50 years ago (170790).

COCKERELL, Prof. T. D. A., Boulder, Colo.: 29 bees, representing 24 species and varieties, of which 7 are represented by types and 1 by cotype (171740).

COCKERILLE, EDITH, Washington, D. C.: 2 surgical instruments used in the practice of dental surgery by Dr. S. J. Cockerille, Washington, D. C. (170741).

COE, ERNEST F., Miami, Fla.: 3 mollusks from Florida (170769).

COE, Prof. WESLEY R., La Jolla, Calif.: Type and 12 paratypes of mollusks (172385).

COLBURN, BURNHAM S., Biltmore, N. C.: 149 archeological objects from the Cherokee area of North Carolina and Tennessee, together with a few from other States (172293).

COLEGIO DE LA SALLE, Cartegena, Colombia: (Through Brother Hilarino Ángel) 15 plants from Colombia (161823).

COLES, Mrs. MARY J., Nashville, Tenn.: (Through W. J. Bower) 1 egg mass of mollusk from St. Petersburg, Fla. (170715).

COLLOM, Mrs. ROSE E. (See under U. S. Department of the Interior, National Park Service.)

COLOMBIAN GOVERNMENT, *Comisión de Botánica de la Secretaría de Agricultura*, Cali, Colombia: 532 plants from Colombia (171624, 171642, 173007); 12 plants (legumes) (171868, exchange).

COLORADO COLLEGE, Colorado Springs, Colo.: 84 plants from Colorado (173275, exchange).

CONANT, ROGER, Philadelphia, Pa.: 21 turtles from Delaware and Maryland (170906). (See also under Prof. Charles E. Burt.)

CONSERVATOR OF FORESTS. (See under British Honduras.)

CONTRERAS, Prof. FRANCISCO. (See under Instituto Geológico.)

CONVERSE, Mrs. LILY S., New York, N. Y.: 49 lithographs by the lender for special exhibition, April 29 through May 26, 1946 (172999, loan); 2 lithographs, "Cottonwood Grove" and "Sunflowers" (173391).

CONWELL, L. A., F. P. O., San Francisco, Calif.: A cigar box full of miscellaneous specimens from New Guinea (170751).

COOK, W. P., San Diego, Calif.: 17 mollusks from San Martín Island, Mexico (172426).

COOLEY, Dr. R. A. (See under Federal Security Agency, U. S. Public Health Service, Rocky Mountain Laboratory.)

COOLIDGE, Mrs. CALVIN, Northampton, Mass.: (Through Mrs. H. W. Underwood) Feather fan, pearl necklace, and lace handkerchief used by donor in the White House (171549).

COOPER, Dr. BYRON N. Charlottesville, Va.: One-half of a fossil brachiopod from the Ordovician of southwestern Virginia (170655, exchange); approximately 750 fossils, the bulk of the collection from the Appalachians of Virginia (173216).

COOPER, Dr. G. ARTHUR, Washington, D. C.: 150 miscellaneous insects, 1,500+ mollusks, 25 crustaceans, 20 turbelarians, and 4 leaches, collected in Texas by donor (170935); 47 mollusks from Virginia (171790). (See also under Walcott Fund.)

COPELAND, Dr. E. B., Berkeley, Calif.: 13 ferns from the Philippine Islands (170985, 172387, exchange).

COPELAND, Lt. ROBERT A., F. P. O., San Francisco, Calif.: 15 plants from the Philippine Islands (170917).

CORNELL UNIVERSITY, Ithaca, N. Y.: (Through Dr. Henry Dietrich) 2 beetles collected in Binghamton, N. Y., from furniture made in Mexico (171406); *Department of Entomology:* (Through Dwight A. Webster) Approximately 60 amphipods (172095).

COTTON TEXTILE INSTITUTE, New York, N. Y.: 27 specimens of cotton textiles produced by American manufacturers for the spring and summer of 1946 (172431).

COTTRELL, R. E., Houston, Pa.: 1 board specimen of the Bullace plum tree grown in Washington County, Pa. (172523); 14 woods from Florida and Pennsylvania (173270).

COX, Dr. GEORGE H., St. Petersburg, Fla.: 7 mollusks from St. Petersburg (172528).

CREASER, Dr. E. P., Hempstead, N. Y.: 1 snapping shrimp (171091).

CRESPO, Ing. GUILLERMO, La Paz, Bolivia: 25–30 miscellaneous insects from Bolivia (170878).

CROCKETT, Dr. R. L., Oneida, N. Y.: 8 plants (171756).

CROSS, Dr. and Mrs. WHITMAN, Chevy Chase, Md.: A collection of American and European rocks and minerals; 1 Chilkat blanket and 6 Navaho blankets (170706).

CROW, Mrs. S. C., Detroit, Mich. (See under the Bingham Family.)

CROWELL, Dr. SEARS, Oxford, Ohio: 8 specimens, including type of a new species of sea anemone (171206).

CROZIER, Dr. BRUCE U., Stillwater, Okla.: 12 slides of cotype specimens of helminths (172872).

CUATRECASAS, Dr. J., Bogotá, Columbia: 158 plants from Colombia; 32 photographs of plants (162978, 171867, exchange). (See also under Colombian Government, Comisión de Botánica.)

CUEVA, JUAN IVAN, Loja, Ecuador: (Through Capt. Albert E. Wolff) Hammered copper ax, with cut-out figures, from Loja, Province of Loja, Ecuador (171153).

CULBERTSON, Prof. A. E., Fresno, Calif.: 9 mollusks from California (173037).

CURRY, JOHN STEUART, New York, N. Y.: 15 lithographs and 8 drawings for special exhibition during September 1945 (171234 loan).

CURTIS, CHARLES B., Litchfield, Conn.: Surveying instrument for measuring horizontal angles, believed by donor to have been used by either Andrew Ellicott or by his son-in-law, David Bates Douglass (171316, loan).

CURTIS, Dr. JOHN T., Jr., Madison, Wis.: 97 plants from Haiti (171087), 171097).

CURTIS, Dr. JOSIAH (deceased): 8 archeological specimens lent to the Smithsonian Institution for display at the Centennial Exhibition, Philadelphia, 1876 (171558).

CURTISS, ANTHONY, Port-au-Prince, Haiti: A collection of reptiles, amphibians, fishes, marine invertebrates, mollusks, and insects from Haiti (170705, 172237).

CUTLER, Dr. HUGH C. (See under Rubber Development Corp.)

CYPERT, Sgt. EUGENE. (See under Lt. Theodore Downs.)

DAHLGREEN, CHARLES W., Oak Park, Ill.: 14 drypoints and etchings by Charles W. Dahlgreen (170839); 136 etchings and drypoints and 1 block print in color (171530).

DAMMERMAN, Dr. K. N., Buitenzorg, Java: 29 vials of isopods from Indian Archipelago (94280); 15 isopods from Lake Klakah, Java (100460).

DAMPF, Dr. ALFONSO, Mexico, D. F.: 1 white-throated wood rat collected at Bocas, San Luis Potosí (171475).

DANIEL, Brother, Medellín, Colombia: 138 plants from Colombia (170729, 172978).

DANIELS, AL, Weiser, Idaho: A fossil egg from Hot Creek Valley, Sioux County, Nebr. (171539).

DANSKE ARKTISKE STATION, Disko, Greenland: 165 plants from Greenland (171647, exchange).

DARROW, Prof. ROBERT A. (See under University of Arizona.)

D'ASCENZO, NICOLA GOODWIN, Bala-Cynwyd, Pa.: 1 specimen of hambergite from Madagascar, weight 0.87 carats (171078); 1 moss agate from India (171641, exchange); sapphire weighing 9.47 carats (172473).

DASHIELL, MARY ELLEN, Washington, D. C.: Lace-edged cotton cambric bolster sham with vine pattern embroidered in fancy knot stitch giving the effect of braiding, which was made about 1867 by the donor's grandmoth-

er, Mrs. Ellen Maria (Hamilton) Dashiell, Port Tobacco, Md. (171051); 1 Stiegel type paneled flip glass, owned originally by Charity Jenkins Boone, great-great-grandmother of the donor (171326).

DAVIS, Maj. H. A. (See under War Department, Army Medical Museum.)

DAVIS, HELEN EDITH, Weatherford, Okla.: (Through Prof. R. Chester Hughes) 7 slides of type specimen of helminth (170712).

DAVIS, Mrs. P. H., Washington, D. C.: A collection of art metal work from Javanese, Sumatran, and other East Asiatic peoples (171560).

DAVIS, ROBERT N., Bolling Field, D. C.: An original radar camera, assembled in North Africa and used in the Italian campaign (172914).

DAYTON, WILLIAM A., Arlington, Va.: 4 plants (170814).

DEADERICK, Mrs. W. H., Hot Springs, Ark.: Approximately 3,500 slides of Cretaceous Foraminifera from Arkansas, plus 327 samples of concentrates, collected by the late Prof. W. H. Deaderick (170103).

DE BEUGHEM, Vicomtesse, Washington, D. C.: Collection of 10 pieces of Belgian needlepoint and bobbin-made laces assembled by Mrs. Brand Whitlock, wife of the Ambassador to Belgium during World War I, and presented by her to the donor (172208).

DE BOURBON-CONDE, Capt. BRUCE A., A. P. O., New York, N. Y.: 53 German postage stamps (170920).

DECKER, Dr. C. E., Norman, Okla.: 50 Paleozoic invertebrate fossils, including 25 type specimens (173343, exchange).

DEE, Mrs. LILIAN MAXIM, Landing, N. J.: Russian cup the design of which commemorates the coronation of Tsar Nicholas II and Tsarina Alexandra in 1896 (171003).

DEIGNAN, H. G., Washington, D. C.: 2 mollusks from Fairfax County, Va. (171548); 7 bird skins from Ceylon (172160); 3 plants from Virginia (172458).

DENCE, WILFORD A. (See under Roosevelt Wildlife Forest Experiment Station.)

DENTON, Dr. J. FRED, Augusta, Ga.: 1 egg of a cowbird (170840); 30 types and paratypes of helminths (172519).

DEOLIVEIRA, Dr. A. C. ESTEVAO, Ceará, Brazil: 5 helminths (172240).

DERANIYAGALA, Dr. P., Pelmadulla, Ceylon. (See under National Museums of Ceylon.)

DESCH, PAUL, Washington, D. C.: 7 cowries (4 species) from Biak Island, Dutch New Guinea (172249).

DETHLEFSEN, E. S., San Francisco, Calif.: 1 beetle (paratype) (173171).

DETWILER, A. B., Arlington, Va.: 1 plant from Virginia (170726).

DICKSON, Mrs. H. R. P., Kuwait, Arabia: 7 small mammals from Kuwait (165569, collected for the Museum).

DIETRICH, Dr. HENRY. (See under Cornell University.)

DINGMON, JOHN, Lake Butler, Fla.: A pocketbook of brown leather lined with a thin, light leather split, made before 1850, by Cobb & Sparks, Lancaster, Mass. (171481).

DISTRICT OF COLUMBIA PUBLIC HEALTH ENGINEERING DEPARTMENT, Washington, D. C.: 5 rats (173349).

DIVEN, Mrs. C. A., Arlington, Va.: Brown cloth coat of latter part of 19th century (172474).

DIX, W. L., Morrisville, Pa.: 6 grasses from Pennsylvania (171689).

DIXON, JOSEPH S. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

DODGE, HAROLD R., Macon, Ga.: A small collection of flies (170511); 19 vials of mosquito and *Dixa* larvae from Georgia (170776); collection of mosquito material comprising 7 vials of mosquito larvae and 6 adults of one species (171207).

DODGE, HENRY, Scarsdale, N. Y.: 2 mollusks from Clearwater Bay, Fla. (167167).

DOLE, Mrs. SARAH PROCTOR, New York, N. Y., and JOHN L. PROCTOR, Washington, D. C.: Naval officer's sword of the Civil War and an Army belt of the same period (171592).

DONAHUE, RALPH J., F. P. O., San Francisco, Calif.: Small collection of insects (170976); a collection of insects, 6 crabs, 5 hermit crabs, 1 dried sponge, earthworms, 7 snakes and 5 frogs, mollusks, fishes, 1 plant and 4 fruits, all from Okinawa (171626, 172086).

DOS PASSOS, CYRIL F., New York, N. Y.: 2 moths, both paratypes (170659).

DOSCHER, JOHN W., Saddle River, N. J.: 37 pictorial photographs for exhibition during February (172258, loan).

DOUGHERTY, Dr. ELLSWORTH C., Berkeley, Calif.: Holotype and allotype of nematode (new species) (171810).

DOUGLAS, Dr. JAMES R., Davis, Calif.. 21 cladocerans from California (172690).

DOWNS, Lt. THEODORE, and Sgt. EUGENE CYPERT, A. P. O., San Francisco,

Calif.: (Through Capt. C. Brooke Worth) 1 mouse; 25 ostracods; miscellaneous insects, spiders, and myriapods; mollusks; fishes; reptiles and their eggs, all from Tinian, Marianas Islands (171291, 171521).

DRABBLE, RICHARD W., Palmer, Alaska: A small collection of insects from the Aleutian Islands (170952).

DRAKE, Dr. CARL J., Ames, Iowa: 7 paratypes of bugs (2 species) (171069, exchange).

DRYANDER, Mrs. EDITH, Cali, Colombia: 5 plants from Colombia (172531).

EAKIN, Dr. RICHARD M., Berkeley, Calif. (See under U. S. Department of the Interior, U. S. Fish and Wildlife Service.)

EARNEST, Mrs. G. E., West Lanham Hills, Md.: 1 garden spider collected by donor in West Lanham Hills (171083).

EAST AFRICAN AGRICULTURAL RESEARCH INSTITUTE, Amana, Tanganyika Territory: 50 plants from East Africa (172398, exchange).

ECCLESTON, O. H., Stockton, Calif.: Portfolio of articles and photographs: "Benjamin Holt Inventor," giving his biography and an outline of the improvements he made in the Combined Harvester, Caterpillar Track, and Caterpillar Tractor (171384).

EDDY, ARTHUR A., Ware, Mass.: 1 motion-picture camera and projector, 1895; 7 glass plates (172401, loan).

EDMONDSON, Dr. C. H., Honolulu, Hawaii: 1 shipworm from Hawaii (172494).

ELIAS, Prof. M. K., Lincoln, Nebr.: A supposed new fossil alga from the Upper Permian rocks of Texas (171194); 20 Permian gastropods from the Carlsbad limestone, New Mexico (172427).

ELLIOTT, Lt. Col. E. W., Washington, D. C.: 8 plants from Galápagos Islands (171795); 9 plants from Japan (172828).

EMLEN, Dr. JOHN T., Baltimore, Md.: 1 black rat (173039).

ERICSON, MILDRED J., Arlington, Va.: 1 mollusk (171694).

ERLANSON, CARL O., Washington, D. C.: 1,800 plants from Panama (170183, collected for the Museum).

ESSEX, Mrs. ROBERT W. (See under Charles R. Schwarz.)

ESTAÇÃO AGRONOMICA NACIONAL, Sacayém, Portugal: 153 plants (172456, exchange).

ESTACIÓN EXPERIMENTAL AGRONÓMICA, Santiago de las Vegas, Cuba: 195 Cuban plants in exchange and 218 as a gift (170709 gift-exchange); (through Ing. Julian Acuna) 27 Cuban plants (172019).

FAGE, Dr. LOUIS. (See under Museum National d'Histoire Naturelle.)

FAIRCHILD, Capt. D. G., Washington, D. C.: 8 mollusks from Canon del Pato, 2,500 feet elevation above Chimbote, Peru (171324); 7 specimens of 7 species of flies, of which 6 specimens are paratypes (171376).

FARNER, Lt. D. S., Washington, D. C.: 3 reptiles and 4 amphibians from Orlando, Fla., (171359).

FARWELL, Capt. BYRON E., Kirkwood, Mo.: Collection of Daunian ware from graves near the ruins of Herdonia, about 20 km. south of Foggia, Province of Apulia, Italy, exhumed by donor while on military duty in Italy (170841, 171863).

FARWIG, R. L., Washington, D. C.: An Eastman Kodak, with fixed focus enlarger for amateur use, 1910 (172683).

FASSETT, Prof. NORMAN C., Madison, Wis.: 2 grasses from Colombia (171283). (See also under University of Wisconsin.)

FAST, FRANCIS A., New York, N. Y.: 12 finger paintings by donor (172689).

FATTIG, Prof. P. W., Atlanta, Ga.: 37 beetles, including 13 paratypes (172649).

FEDERAL SECURITY AGENCY, *U. S. Office of Education*, Washington, D. C.: 80 models of aircraft (scale 1:72) used by the U. S. Navy in recognition training during World War II, which were produced in the public schools of this country under the supervision of the Industrial Arts and Vocational Departments (172400).

U. S. Public Health Service, National Institute of Health, Bethesda, Md.: 10 mollusks from California and Florida (171136); 34 freshwater shells from Louisiana and Texas (171450).

U. S. Public Health Service, Rocky Mountain Laboratory, Hamilton, Mont.: (Through Dr. R. A. Cooley) 1 tick: 4 paratypes of insects (171079, 171378); (through Maj. W. L. Jellison) skin and skull of a raccoon; 20 insects (172165, 172245); 3 ticks, new species, including a paratype female and two male paratypes (172616); 1 meadow mouse (172659).

U. S. Public Health Service, New York, N. Y.: (Through Ralph C. Barnes) 19 specimens of mosquito material (171940).

U. S. Public Health Service, San Juan, Puerto Rico: (Through Harry D. Pratt) 5 specimens of mosquito material from Puerto Rico and the Virgin Islands; 6 specimens of mos-

quito material; 19 slides of mosquito material; representing 7 species (172714, 172992, 173379); (through Capt. G. A. Thompson) 181 specimens of mosquito material (171674);

U. S. Public Health Service, Division of Nurse Education, Washington, D. C.: Cadet nurse uniform of World War II (172015). (See also under U. S. A. Typhus Commission.)

FELLOWS, PERRY A. (See under Foreign Economic Administration.)

FENDER, KENNETH M., McMinnville, Oreg.: 11 paratypes of beetles (172392).

FENNAH, R. G., Castries, St. Lucia, B. W. I.: 1 insect holotype (171267).

FERGUSON, Capt. M. S., Princeton, N. J.: 195 mollusks from Mindanao, Philippines (171275).

FERRIS, Mrs. ROXANA S. (See under Stanford University.)

FESSENDEN, Dr. GEORGE R., Washington, D. C.: 2 plants (*Viola*) from North Dakota (170730).

FIELD, W. D., Washington, D. C.: 981 plants from Okinawa (172216).

FINDLAY LABORATORY, CARLOS, Bogota, Colombia. (See under Rockefeller Foundation.)

FISH, Lt. Comdr. CHARLES J., Washington, D. C.: 40 crustaceans, 62 mollusks, 1 fish, and 3 echinoderms from the region of Casablanca, Morocco (170591).

FISHER, GEORGE L., Houston, Tex.: 102 plants from Mexico (171306).

FITCH, J. T., Royal Oak, Mich.: 2 rats and 4 birds from the Philippines (172471).

FITZGERALD, Dr. J. O., Jr., Richmond, Va.: 60 pictorial photographs for exhibition during October 1945 (171348, loan); 6 pictorial photographs for the permanent collection (171949).

FLAGG, ARTHUR L., Phoenix, Ariz.: Specimen of rosasite (172125).

FLEMING, Col. WILLIAM D., Camp Carson, Colo.: 14 vials of diatom material from various Pacific Island areas (171891).

FLIPPO, JOSEPH, Fort Republic, Md.: 1 horseshoe crab, encrusted with Bryozoa (168581, exchange).

FLORIDA STATE MUSEUM, Gainesville, Fla.: 73 specimens of mollusks (169347).

FLORIDA, UNIVERSITY OF, *Department of Biology*, Gainesville, Fla.: (Through Margaret C. Johnson) 5 slides representing 4 species of sponges, including a portion of one type (171555).

FORBES, HELENA M. L. (See under South Africa Department of Agriculture.)

FORD, EDWARD R., Newaygo, Mich.: 1 set of eggs of Baltimore oriole (including 1 of the cowbird and 3 of the oriole) and 1 cowbird egg from a chipping sparrow's nest (170912).

FORD, Rev. PAUL D., Sunbury, Pa.: 2 pieces of hydrocoral from New Providence Island (170435).

FOREIGN ECONOMIC ADMINISTRATION, Washington, D. C.: (Through Perry A. Fellows) 31 pinned named specimens in 15 species and 12 slides of mosquito material from Ethiopia (170978); 5 specimens of calcite from Izacas mine, Municipio La Palma, Cundinamarca, Colombia (171343); 270 plants from Ecuador, collected by Dr. William C. Steere (171797); (Through Prof. Ira L. Wiggins) 49 plants from Ecuador (172937).

FORSYTH, Lt. R. L., Oak Park, Ill.: 21 mollusks from Makin Island, Gilbert Islands (170778).

FOSHAG, Dr. W. F., Washington, D. C.: 2,500 miscellaneous insects, 16 fishes, 600 mollusks, 10 reptiles and batrachians, and 62 crustaceans and 1 worm, collected in the states of Morelos, México, Guerrero, Michoacán, Mexico, 1942–45 (171623): 1 plant from Mexico (172298); archeological material purchased from natives in various parts of Mexico (172755). (See also under Smithsonian Institution, National Museum.)

FOX, Lt. ADRIAN C.; Leeds, N. Dak.: A collection of mammals, reptiles, mollusks, marine invertebrates, and insects from Banika Island, Russell Islands, British Solomon Islands (170608), fishes, echinoderms, mollusks, crustaceans, reptiles, and insects from the Philippines and Hawaii (170981).

FOX, PORTLAND P., Welch Cove, N. C.: 35 Mississippian fossils from lower Mississippian limestone at the Kentucky Dam on the lower Tennessee River near Gilbertsville, Ky. (171116).

FRAMBURG & Co., H. A., Chicago, Ill.: 37 models of United States, French, and British naval vessels of World War II (171428).

FRANCLEMONT, Dr. JOHN G., Ithaca, N. Y.: 41 specimens of Hymenoptera from the Solomon Islands, Philippine Islands, and North America (173172).

FRASCHE, DEAN F., Washington, D. C.: 30 specimens of uranium minerals from "Union Miniere du Haut Katanga," Belgian Congo (171451).

FRASER, Rt. Rev. Msgr. SAMUEL V., Aurora, Kans.: 7 plants (171999).

FREDERICK, ESTATE OF MARY LOUIS: (Through Isabella C. Wells) Collec-

tion of knives and swords from Java and India and pipes from Japan obtained by Miss Frederick in these countries between 1910 and 1912 (172617).

FRETER, THEODORE H., Alexandria, Va.: 16 Japanese net floats of blown glass, picked up on the coast of Oahu, T. H. (173381).

FROESCHNER, Dr. RICHARD C., St. Louis, Mo.: 2 bugs, type and allotype (170689).

FROST, C. A., Framingham, Mass.: a collection of miscellaneous insects (172666).

GABRIEL, Mrs. E. C., Montour Falls, N. Y.: An ambrotype on colored glass (172575).

GABRIELSON, Dr. IRA N. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

GADDIS, Prof. LELLA R., West Lafayette, Ind.: Specimen of vegetable-dyed, hand-wóven carpeting, homespun from hemp and wool by the donor's grandmother and aunt (172484).

GALINDO, PEDOR, Panama, Panama: 11 specimens of mosquito material comprising 5 adults and 6 slides (171038).

GARRETT, A. O., Salt Lake City, Utah: 2 plants from Utah (172798).

GARSIDE, CHARLES. (See under Estate of Robert Underwood Johnson.)

GENERAL MOTORS CORP., *Inland Manufacturing Division*, Dayton, Ohio: United States carbine, calibre 0.30, type M2, number Xd-49, with 30-round magazine and bayonet (171054).

GENTRY, HOWARD SCOTT, Ann Arbor, Mich.: 22 plants from Mexico (170692, 172163).

GEOPHYSICAL INSTRUMENT CO., Arlington, Va.: A Geiger counter (171076), loan).

GETZ, DOROTHY, Baltimore, Md.: 2 marine shells from Panama (171858).

GILKEY, Dr. HELEN M. (See under Oregon State College.)

GILLOGLY, L. R., Sacramento, Calif.: 6 beetles, comprising 4 paratypes and 2 other specimens (172891).

GILMORE, Dr. RAYMOND M., Washington, D. C.: 5 small rodents from south Ecuador (171692).

GOLDBERG, LOUIS, Norwich, Conn.: 6 pairs of old ice skates (170755).

GONZÁLES G., ALEJANDRO, Tapijulapa, Tabasco: 44 specimens of dried fish from the sulphurous grotto near the town of Tapijulapa, Tabasco, Mexico, collected by the donor in April 1945 (170904).

GOODCHILD, Dr. C. G., Springfield, Mo.: 14 fresh-water clams from Massachusetts (171157).

GOODLOE, Lt. Comdr. GREEN CLAY (deceased): (Through Dr. A. B. Bennett, Washington, D. C.) Model of the U. S. destroyer *Alden* (172475).

GOTTSCHALK, Dr. CARL W., Salem, Va.: 1 aberrant butterfly collected in Salem (170658).

GOULD, Prof. FRANK W. (See under University of Arizona.)

GOULD, H. P., Washington, D. C.: A collection of miscellaneous personal and household articles of the period 1830–70, used by members of the Gould family, and a Croix de Guerre medal (171233).

GRAF, J. E. (See under Smithsonian Institution, National Museum.)

GRASSL, CARL O. (See under U. S. Department of Agriculture, Bureau of Plant Industry, Soils, and Agricultural Engineering.)

GRAY, Rev. JOHN, Charlottesville, Va.: (Through Dr. J. J. Murray) 1 bird skin (171579).

GREENE, FRANK C., Kansas City, Mo.: A shell from Missouri (172564).

GREENE, GEORGE M., Harrisburg, Pa.: 36 specimens of flies and Hymenoptera collected at Linglestown, Pa. (172991).

GREGER, Dr. D. K., Fulton, Mo.: About 170 Upper Devonian fossils from Missouri (171344, 171703); about 350 assorted Mississippian invertebrates from Missouri (171990, exchange).

GREGG, Dr. ROBERT E., Boulder, Colo.: 18 ants (171727, exchange).

GREGORY, VERA, Oklahoma City, Okla.: 2 seamless, double-woven, jacquard coverlets (171995).

GRESSITT, Dr. J. LINSLEY, San Francisco, Calif.; 15 mosquitoes from Japan (172480); 36 plants from Guam (172571). (See also under Lt. G. E. Bohart and Navy Department, Medical Research Unit No. 2.)

GRIFFITH, G. H. (See under Treasury Department, Bureau of Customs.)

GRIPON, Madame PAUL E. H., Charlottesville, Va.: Photograph of Diplome d'Honneur awarded to the donor by the International Jury of Awards of the Exposition Coloniale Internationale, Paris, 1931, for her bronze bust of General Gorgas (171910).

GROBER, Capt. SAM, A. P. O., San Francisco, Calif.: 9 plants from Japan (172382).

GULLEY, M. G. (See under Heirs of Rose Jones.)

GUNCKEL, HUGO, Temuco, Chile: (Through George Tays) 1 plant from Chile (170915).

GUNTER, GORDON, Rockport, Tex.: Type of new flatfish from 40 miles south of Port Aransas, Tex. (172255); 3 fishes from off Galveston, Tex. (172300); 1 type specimen of fish. (173114).

GURNEY, Dr. A. B., Washington, D. C.: 36 specimens of marine shells from Subic Bay, Luzon, Philippine Islands (173279).

HAAS, Dr. FLORA A., Sorrento, Fla.: 14 plants from Arkansas (171379).

HAERTEL, Dr. M. H., Falls Church, Va.: 2 wood specimens from Cuba (171143).

HALE, Dr. HERBERT M. (See under South Australian Museum.)

HALSEY, Admiral WILLIAM F., Washington, D. C.; Altar stave of carved wood, presented to donor by a native chief in New Caledonia (172618).

HANNA, WILSON C., Colton, Calif.: 1 set of eggs and nest and 1 skin of rufous-necked sandpiper (171586, exchange): 1 set of eggs of the red-spotted bluethroat (172306 exchange).

HANSEN, Lt. MERLE F., and Lt. HOWARD A. BERN, A. P. O., San Francisco, Calif.: 46 fresh-water snails from Dagami, Leyte, Philippines (170674).

HANSON, Dr. JOHN F., Newtonville, Mass.: 2 insects, paratypes (171313).

HANSON, Capt. JOHN J., Indiantown Gap Military Reservation, Pa.: Model gasoline aircraft engine, "Scrapper," marked with serial No. 930 (170756. loan).

HARDCASTLE, Dr. A. BASCOM, Hyattsville, Md.: 7 vials of miscellaneous insects and centipedes, a collection of ants, and a few crustaceans from Okinawa (172995).

HARDING, Dr. J. P. (See under British Museum (Natural History).)

HARLOW, JAMES R., New Orleans, La.: 101 plants from Panama (171596).

HARMSTON, FRED C., Salt Lake City, Utah: 22 flies (172582).

HARNED, Prof. R. W., Washington, D. C.: 2 isopods (99473).

HARPER, Dr. FRANCIS, Swarthmore, Pa.: 48 vials of insects (171277); small collection of ectoparasites (172048).

HARPER, Dr. R. M., University, Ala.: 53 plants from Alabama (173356).

HARRINGTON, W. C., Taft, Calif.: 173 marine shells and 1 crab from Caroline Islands (172940).

HARRIS, JOHN E., Washington, D. C.: 1 centipede from China, discovered in mail sack (170750).

HARRIS, Mrs. HELEN M., Washington, D. C.: Knife and sheath from the Gurkhas of Nepal, collected by the husband of donor while in military service in India (172965).

HARRISON, Prof. B. F. Provo, Utah: 65 plants chiefly from Utah (173188).

HARRY, H. WH., F. P. O., San Francisco, Calif.: A piece of snail tissue containing immature nematodes (171578).

HART, Maj. THOMAS A., Washington, D. C.: 48 mosquitoes, representing 15 species, from Goodenough Island, Papua (170863).

HARVARD UNIVERSITY, *Arnold Arboretum*, Jamaica Plain, Mass.: (Through Dr. A. C. Smith) 10 grasses from Fiji (171516, exchange); 142 plants from Colombia and Fiji (171671, 172274, 172275, 172276, 172277, exchange).

Botanical Museum, Cambridge, Mass.: (Through Dr. L. O. Williams) 2 orchids from Mexico and Bolivia (172655, exchange).

Department of Mineralogy, Cambridge, Mass.: Specimen of sampleite from Chuquicamata, Chile (172647, exchange).

Gray Herbarium, Cambridge, Mass.: 1 plant from Texas (170916); 2 illustrations of North American ferns (171454); 2 ferns from Argentina (171476, 172889); 951 plants (171498); 45 ferns, mostly from New England (171561, 172130); a fern from Argentina (172889). Exchange. (Through Dr. Lyman B. Smith) 4 plants from Colombia, collected by Helen Schiefer (172670, exchange).

Museum of Comparative Zoology, Cambridge, Mass.: (Through Lt. R. Tucker Abbott) 16 paratypes of mollusks from the Philippines (173215); (through Dr. Joseph Bequaert) 3 mollusks (171036); 3 mollusks from Tamaulipas, Mexico (169800); 9 lizards from Honduras (170911); 1 beetle (172450); 3 ants (173111); 1 beetle (paratype) (173173); 6 cotypes of 2 species of ants, 5 beetles paratypes, 1 cotype specimen of ant (171196, 172126, 172827). Exchange.

HARVEY, Dr. E. W. (See under Oregon State College.)

HASBROUCK, Dr. E. M., Washington, D. C.: 1 American merganser, received in the flesh (172482); 2 geese (172687, exchange).

HASKIN, J. R., Babson Park, Fla.: 1 beetle, collected in Inverness, Fla. (171697).

HAUGHT, OSCAR, Littleton, W. Va.: 1,469 plants and 1,840 shells from Colombia (171347, 171643).

HAVEN, ROBERT C. (See under Dr. Carl L. Hubbs.)

HAYDEN, Hon. CARL, Washington, D. C.: 1 specimen of fossil coniferous wood

from the boundary of the Navajo Indian Reservation north of Holbrook, Ariz. (170656).

HAYS, DORIS W. (See under U. S. Department of Agriculture, Forest Service.)

HEDGPETH, JOEL W., Rockport, Tex.: 6 amphipods (170763); 1 sea anemone and 1 spider crab (171439); 1 nudibranch from Port Aransas, Tex. (173049).

HELD, Pfc. ED. (See under Borys Malkin.)

HELMS, HENRY, Arlington, Va.: 1 red fox taken near Leesburg, Va. (171982).

HENBEST, Dr. L. G., Washington, D. C.: 200 beetles collected on Capulin Volcano, south of Raton, N. Mex. (172533); 62 mollusks from Utah (172910).

HERALD, Capt. EARL S., Orlando, Fla.: 11 fishes from Florida (171870, 172454); (through Dr. Carl L. Hubbs) 11 fishes from Miami Springs, Seminole County, Fla. (172577).

HERMANN, Dr. J. F., Greenbelt, Md.: 4 plants from Maryland (172457).

HERRE, Dr. ALBERT W. (See under Stanford University, Natural History Museum.)

HESS, FRANK L., Washington, D. C.: 1 piece of Miocene limestone containing various species of fresh-water mollusks collected by John L. James at Manhattan, Nev. (170785).

HESTER, J. PINCKNEY, Fredonia, Ariz.: 5 plants from Arizona (170815, 171020).

HICKEY, Mrs. HAZEL CHAFFEE, Washington, D. C.: 2 tin candle molds (172453).

HIGGINS, E. B. (See under Natural History Museum.)

HILDEBRAND, Dr. SAMUEL F. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HILL, Dr. ROLLA B., New York, N. Y.: 19 mosquitoes, representing 5 species (170862); 2 slides of mosquito material, holotype female with larval and pupal skin on slide, and allotype male, slide of genitalia, and larval and pupal skins only (171497).

HINCKLEY, L. C., Marfa, Tex.: 9 grasses from Texas (172093).

HINES, Capt. HARRISON R., A. P. O., San Francisco, Calif.: 1 monitor lizard from the Philippine Islands (170948).

HINTON, JAMES C., Saltillo, Mexico: 106 plants from Mexico (172080).

HITCHCOCK, Dr. C. LEO. (See under University of Washington.)

HODGE, Lt. Gen. JOHN R. (See under Twenty-fourth Corps, U. S. Army.)

HOFFMAN, RICHARD L., Charlottesville, Va.: 6 shrews, 4 rodents, and 1 bat, collected near Clifton Forge, Va., by donor (171690, 171883); 1 salamander and 1 frog collected by donor at Charlottesville (172629).

HOKE, GLADYS. (See under State Plant Board of Mississippi.)

HOLDRIDGE, L. R., Port-au-Prince, Haiti: 196 plants from Haiti (170639, 172282).

HOLLISTER, J. M., Melbourne, Fla.: Fern from Florida (172996).

HOLLOMAN, J. A., Jr. (See under Little Museum.)

HOLMES, WALTER W. (deceased), St. Petersburg, Fla.: 2 humeri, parts of both mandibles, radius and ulna, coracoid, dorsal vertebra, and incomplete sacrum of extinct bird from the Pleistocene of Florida (170734).

HONESS, Capt. RALPH F., A. P. O., San Francisco, Calif.: Approximately 4,110 specimens of mollusks from the Philippines (170738); 116 specimens of fresh-water mollusks from near Atsugi, Honshu, Japan (171536).

HOOGSTRAAL, Capt. HARRY, and STANLEY G. JEWETT, Jr., A. P. O., San Francisco, Calif.: A small collection of insects from the South Pacific (170454). (See also under Borys Malkin and War Department, Office of the Surgeon General.)

HORN, CLAUD L. (See under U. S. Department of Agriculture, Office of Foreign Agricultural Relations.)

HOSAKA, EDWARD Y., Honolulu, Hawaii: 4 grasses from the Hawaiian Islands (171436).

HOTCHKISS, NEIL. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HOUGH, Mrs. MYRTLE, Washington, D. C.: A collection of miscellaneous ethnological material, consisting of baskets and textiles from the Pueblo, Navaho, and Pima Indians, a sarong from the Moro, and a European embroidered tablecloth (171864).

HOUGH, P. R., Washingtons Birthplace, Va.: 1 young whistling swan (171850).

HOUSTON MUSEUM OF NATURAL HISTORY, Houston, Tex.: 1 cultivated tree (171431); 2 plants from Texas (172624).

HOWARD, Mrs. MARGARET BELL, A. P. O., Seattle, Wash.: 1,000 plants from Attu Island (172468).

HOWE, D. F., Chula Vista, Calif.: 12 plants from California (172402).

HOWELL, Prof. A. BRAZIER, Baltimore, Md.: 13 shells collected on the Allen Group, Exuma Keys, Bahama Islands, March 19, 1946 (172860).

HOWELL, JOHN THOMAS. (See under California Academy of Sciences.)

HUBBS, Dr. CARL L., La Jolla, Calif.: 1 beaked whale, collected on shore near Scripps Institution at La Jolla, on July 25, 1945, by donor (171165); 1 beaked whale, female, stranded at Del Mar, San Diego County, Calif., September 25, 1945, collected by donor (171551). (See also under Capt. Earl S. Herald and University of California, Scripps Institution of Oceanography.)

HUBBS, Dr. CARL L., JAMES B. SCHULTZ, and ROBERT C. HAVEN, Washington, D. C.: 1 fossil porpoise consisting of portions of skull, part of scapula, and 11 vertebrae, found in Calvert formation at Scientists Cliffs, Md. (173075).

HUGHES FUND, BRUCE, Smithsonian Institution: Potsherds collected on the surface at various sites throughout Trans-Jordan by Dr. Nelson Glueck for American Schools of Oriental Research and received at Museum in May 1942 (162842); archeological material from Ezion-Geber, seaport of King Solomon, on eastern arm of Red Sea (172651).

HUGHES, Prof. R. CHESTER. (See under Helen Edith Davis.)

HUNT, WILLIAM H., Washington, D. C.: Front panel of a Roman Catholic vestment, "dalmatic," from Yugoslavia (170720).

HUNZIKER, Dr. ARMANDO T., Buenos Aires, Argentina: 61 plants from Argentina (172316, 172727).

HURLEY, JOHN B., Yakima, Wash.: 1 bird skin (170758, exchange).

HYSLOP, JAMES A., Silver Spring, Md.: 1 crested flycatcher and 4 eggs of same (170719).

ILLINOIS STATE NATURAL HISTORY SURVEY DIVISION, Urbana, Ill.: (Through Dr. Herbert H. Ross) 99 flies from Korea (171941).

ILTIS, T/5 HUGH H., A. P. O., New York, N. Y.: 50 plants and 1 legless lizard from France (170590).

IMLER, EDGAR, New York, N. Y.: 40 prints by the donor, for special exhibition during April 1946 (172830, loan).

INGLES, Dr. LLOYD G., Fresno, Calif.: 1 crayfish (171723).

INGRAM, Lt. R. L. (See under Navy Department, Medical Research Unit No. 2.)

INSTITUTE OF INTER-AMERICAN AFFAIRS, Washington, D. C.: (Through W. C. Brister) 6 plants from Paraguay (171584); (through Dr. O. R. Causey) 26 slides containing 23 specimens of flies, 21 of which are holotypes (171232).

INSTITUTO BUTANTAN, São Paulo, Brazil: 105 frogs from Brazil (147879).

INSTITUTO DE BOTÁNICA DARWINIÓN, San Isidro, F. C. C. A., Argentina: (Through Dr. Arturo Burkart) 300 plants from Argentina (171123).

INSTITUTO DE CIENCIAS NATURALES, Bogotá, Colombia: 1,004 plants from Colombia (171420, 171455, 171456, 171650, 172552, 173077, exchange).

INSTITUTO GEOLÓGICO DE MÉXICO, Mexico D. F.: (Through Prof. Francisco Contreras) 101 invertebrate fossils from Jurassic and Cretaceous rocks of Mexico (166899, exchange).

INSTITUTO DEL MUSEO, La Plata, Argentina: (Through Dr. Ángel L. Cabrera) 125 plants from Argentina (171121, exchange).

INSTITUTO MIGUEL LILLO, Tucumán, Argentina: 1,612 plants from Argentina (170866, exchange).

INTERIOR, U. S. DEPARTMENT OF THE, *Fish and Wildlife Service*, Washington, D. C.: (Through Dr. Ira N. Gabrielson) 1,037 fishes, marine invertebrates, mollusks, echinoderms, coelenterates, insects, plankton, and 1 bat collected by U. S. Fishery Mission in Chile, 1944–45, in cooperation with "The Corporación de Fomento de la Producción Chile" (167496); (through J. R. Alcorn) 239 fishes, including 5 adults of rare sucker from the Lahontan Basin and the Snake River drainage of Nevada, collected by J. R. Alcorn between February 12, 1944, and September 3, 1945 (169329); (through Dr. Richard M. Eakin) a large collection of miscellaneous marine invertebrates, fishes, and mollusks collected by the U. S. Fisheries steamer *Albatross* and stored at the University of California (170423); (through Dr. Samuel F. Hildebrand) 42 fresh-water fishes from Cape Romain National Wildlife Refuge, McClellanville, S. C., collected July 10, 1944, by William P. Baldwin (170848); (through John C. Pearson) collection of miscellaneous invertebrates comprising penaeid larvae; miscellaneous shrimps; mysids; plankton samples, including miscellaneous Crustacea, jellyfish; 2,848 fishes; mollusks; macrobrachium (170881); (through Neil Hotchkiss) 103 plants from the Hudson Bay region, Ontario, and 25 plants, mostly from the eastern United States (171041, 171199); small collection of mollusks and barnacles from the Pribilof Islands, Alaska (171387); 777 birds from Georgia and Louisiana, collected by

T. D. Burleigh and others (171416); 1 bird, received from M. G. Vaiden, Rosedale, Miss.. 171417); 222 birds from Newfoundland, collected by Peters and Burleigh (171418); (through Harris W. Magnusson) 9 fishes from Holy Cross, Yukon River, Alaska, collected August 9, 1945, by Lawrence Haffie, S. J. (171699); (through Dr. Belle A. Stevens) 38 identified shrimps and 2 fishes (172076); 1 brown bat (172152); 1 mouse (172359); 10 specimens of featherwork made by the Eskimos of Greenland from feathers and skins of wild birds (172486); (through Joseph S. Dixon) 35 plants from the Crater Lake National Park, Oreg. (172744); 7 bird skins from Truk Atoll (172885); rose-breasted grosbeak from Barbuda, British West Indies (172982); (through Dr. John W. Aldrich) 32 mollusks from Bulls Island, Charleston County, S. C. (173339); 269 mammals transferred by Fish and Wildlife Service and entered in the Museum catalog, between July 1, 1945, and June 15, 1946, not otherwise accessioned (173346).

Geological Survey, Washington, D. C.: 445 specimens of New England pegmatites, North Carolina mica, and Canadian asbestos, collected by David M. Larrabee (170974); 1 specimen of picrolite from Buck Creek Corundum Mine, Clay County, North Carolina (171317); 7 brachiopods and 2 echinoid spines from the Island of Eua, Tongan group, Pacific Ocean (171885); 200 specimens of invertebrates of Jurassic (Morrison) age, from Sage Creek dome, Wind River Basin, Wyo. (171936); 49 Tertiary ostracods, 13 Mesozoic ostracods, and 14 Mesozoic mollusks, from the Ohio Oil Co., Salisbury, Md. (172026); 102 fossil crustaceans of probably Carboniferous age collected by Robert A. Laurence at Douglas Dam, Sevier County, Tenn. (172056); 3 lots comprising about 300 specimens of Recent and Pleistocene Foraminifera (172057); 585 specimens of ammonites from the Crestaceous of Wyoming (172058); 31 Middle Devonian invertebrate fossils from the Batesville Manganese District, Arkansas (172288); 2 specimens of gray fluorite cubes from district near Marion, Ky. (172388); 3,700 type specimens of Mississippian and Pennsylvanian and Permian invertebrates (172421); 10 samples of bauxite and associated minerals from Babelthuap Island, Palau Islands, collected by Dr. H. S. Ladd (172787); a collection of 11 minerals from the State of Washington (172962); 63 samples of assorted Foraminifera from the Carboniferous and Permian rocks of the midwest and western United States (172971); a collection of chrome ore and associated rocks from Cuba (173127); 1 lot of Jurassic brachiopods from the Ignek formation in northeastern Alaska and 1 lot of Liassic brachiopods from Huancavelica, Peru (173129); about 1,000 specimens of Devonian and Mississippian invertebrates from the Central Mineral Region, Texas, collected by P. E. Cloud, Jr. (173133); 5 fossil egg capsules of chimaeroid fishes from the Upper Cretaceous from Mexico and New Mexico and from the Oligocene of Alaska (173134); 95 Upper Cretaceous mollusks of the lower Ripley formation near Dumas, Miss. (173342); 4 Upper Ordovician brachiopods from the Maquoketa of Iowa (173344).

National Park Service, Boulder Dam National Recreational Area, Boulder City, Nev.: Approximately 500 bones of mammals, reptiles, and birds, excavated from Rampart Cave, Ariz. (165297, loan); (through Louis Schellbach) 1 cyprinid fish from Grand Canyon, Ariz., and 1 scorpion from Arizona (168234, 171134); (through Mrs. Rose Collom) 55 plants from Arizona (170626); 3 plants from Grand Canyon, Ariz. (171751).

INTERNATIONAL BUSINESS MACHINES CORP., Washington, D. C.: 3 original devices forming the basis of the card-punch tabulating-machine business invented by Herman Hollerith and used in 1889 in compiling the Tenth Census, as follows: Pioneer Hollerith tabulating machine; pioneer Hollerith key punch; and pioneer Hollerith sorting box (171118).

IRONS, JOHN H., Thousand Island Park, N. Y.: 4 specimens of mollusk from North Inlet, Lake Worth, Fla. (173232).

IVES, Lt. RONALD L., Tooele, Utah: 72 invertebrate fossils from the Pleistocene of Utah (172380).

JACKSIE, Corp. RICHARD, Langley Field, Va.: 10 shell and stone artifacts from Munda, New Georgia Island, in the Solomon Islands Group (171159).

JACOBS, Mrs. HAROLD J., San Pedro, Calif.: 15 mollusks from near Catalina Island (172520).

JACOBSON, MORRIS K., Rockaway, N. Y.: 99 land and fresh-water mollusks from the Peekskills (171273).

JAMES, CLAYTON M., Landover, Md., 20 birds (172754, 173096).

JAMES, Dr. M. T., Fort Collins, Colo.: 5 fly larvae (173217); 18 flies, representing 6 species, 4 of which are represented by holotypes and 2 by cotypes (171195, exchange); 7 flies (171321, exchange).

JELLISON, Dr. WILLIAM L. (See under Federal Security Agency, U. S. Public Health Service, and U. S. A. Typhus Commission.)

JEWETT, STANLEY G., Jr. (See under Capt. Harry Hoogstraal and Borys Malkin.)

JIMÉNEZ, Dr. JOSÉ DE JS., Santiago, Dominican Republic: 110 plants from the Dominican Republic (171435, 171803, 171966, 172417).

JOHN, E. W., Delta, Utah: 2 Middle Cambrian trilobites from Utah (172193).

JOHNSON, Mrs. GRACE HOBBS, Aurora, Ill.: A collection of 624 specimens of American pressed glass from Sandwich, Mass., Pittsburgh and Philadelphia, Pa., Wheeling, W. Va., and Midwestern factories (170852).

JOHNSON, MARGARET C. (See under University of Florida, Department of Biology.)

JOHNSON, ESTATE OF ROBERT UNDERWOOD: (Through Charles Garside) 1 engraved wood-block by Timothy Cole used for a bookplate for Dr. Johnson (172257).

JOHNSTON, Dr. EARL S., Washington, D. C.: A case of surgical instruments used by Dr. James William White (1850–1916), of Philadelphia, Pa. (170789).

JONES, HEIRS OF ROSE: (Through M. G. Gulley) Pittsburgh, Pa.: Wedding dress of the period of 1855 (173244).

KADEN, HANS, Philadelphia, Pa.: 5 pictorial photographs for permanent collection: "Dawn," "Winter Splendor," "Coming In," "A Little Window," and "Path of Light" (170953).

KANSAS, UNIVERSITY OF, *Department of Entomology*, Lawrence, Kans.: (Through Prof. R. H. Beamer) 174 flies, representing 52 species, 31 of which are represented by 94 paratypes and 1 by a metatype (170961).

KAPROVICKAS, ANTONIO, Buenos Aires, Argentina: 58 Argentine plants (172317).

KARTMAN, Lt. LEO, Camp Gordon, Ga.: 3 cotton rats from Camp Gordon (172652).

KEARNEY, Dr. THOMAS H., San Francisco, Calif.: 1 grass from Arizona (171672).

KELSO, LEON, Washington, D. C.: Fragment from type specimen of a grass (170816).

KENDALL MILLS, Walpole, Mass.: 15 study samples of "Webril," an unwoven textile cloth made by blending heat-softening fibers, such as cellulose acetate or vinyon, into a film of carded cotton (171279).

KENT, OTIS BEALL, Washington, D. C.: 41 strands of beads of various gemstones, ivory, coral, etc. (172157).

KENTROS, Corp. SAM P., A. P. O., New York, N. Y.: Bronze bust of Adolf Hitler (171449).

KERR, Prof. PAUL F., New York, N. Y.: 2 new minerals, 1 from Shinkolobwe mine, near Jadotville, and 1 from Kasompi near Kambove, Haut Katanga, Belgian Congo (171375).

KERR, Corp. WILLIAM K., F. P. O., San Francisco, Calif.: 1 wormsnake from Okinawa (170836).

KIENER, Dr. WALTER, Lincoln, Nebr., 18 grasses from Nebraska (171849).

KING, Lt. Col. W. V. (See under D. J. Lee and War Department, Surgeon General's Office.)

KIRK, Dr. EDWIN, Washington, D. C.: A green and lavender jade bracelet from China (172521).

KLEPPER, Mrs. LEON. (See under Estate of Dr. Harry M. Vastine.)

KNIGHT, Dr. J. BROOKES, Washington, D. C.: Approximately 5,000 Pennsylvanian fossils from the St. Louis outlier, St. Louis Mo. (172123). (See also under Walcott Fund.)

KNIGHT, Lt. Comdr. K. L. (See under Navy Department, Naval Medical Research Unit No. 2.)

KNOCH, Mr. and Mrs. WILLIAM P., Grand Junction, Colo.: 82 fishes, trouts, minnows, and sculpins, from streams in Garfield and Mesa Counties, Colo., collected by donors between May 1 and August 5, 1945 (171081); 8 fishes and 1 crayfish from Mesa and Montrose Counties, Colo. (172499).

KNOWLTON, Dr. GEORGE F. (See under Utah State Agricultural College.)

KNOX, R. O., Washington, D. C.: 36 plants from the Caroline Islands (172281).

KNULL, Prof. JOSEF N., Columbus, Ohio: 1 beetle, paratype (171939).

KOCH, H. J., Somerset West, South Africa: 76 mollusks from South Africa (172974).

KOCH, W. H., Somerset West, South Africa: 25 shells from South Africa (173340).

KORN, MRS. ARTHUR, Hoboken, N. J.: Transmitter and receiver of Dr. Arthur Korn's phototelegraphy apparatus of 1904 (173358).

KORTJOHN, MARTIN F. (See under American Numismatic Association.)

KRAUSS, N. L. H., Honolulu, Hawaii: 1 frog from Cuernavaca, Morelos, Mexico (170903); 32 slides of Hawaiian thrips, representing 16 species (172743); 3 mollusks from Saipan and Guam (173210).

KROMBEIN, KARL V., Washington, D. C.: 1 mollusk from Nadzab, New Guinea (172911); 1,874 miscellaneous insects, all mounted, collected from New Guinea and the Ryukyu Islands (173268).

KRUMMEL, CARL, Baltimore, Md.: 27 bird skins from Peru (171246).

KRYGER, Dr. J. P., Flintinge, Denmark: 205 vials of coleopterous larvae, all reared, from Denmark (172037).

KUMM, Dr. HENRY W. (See under Rockefeller Foundation.)

KUNTZ, Lt. (jg) ROBERT E., Silver Spring, Md.: 868 fishes, 10 mollusks, 55 crustaceans, and 50 coelenterates from Tulagi and Florida Islands, Solomon Islands, South Pacific, collected by the donor in 1944 and 1945 (170988).

LADD, V. E., Toledo, Ohio: 2 Devonian crustaceans from Mill Creek, Lake County, Ohio (172243).

LAFFOON, JEAN L. (See under Navy Department, Naval Medical Research Unit No. 2.)

LAGERLOEF, Col. HANS, New York, N. Y.: Strip of 3 Panay Provisional postage stamps issued in the Philippine Islands in 1899 (173130).

LALICKER, Dr. CECIL G., Norman, Okla.: 127 Cretaceous and Paleozoic invertebrate microscopic fossils, including 50 type specimens (173341, exchange).

LAMBERT, Maj. WM. H., A. P. O., San Francisco, Calif.: 181 plants from the Philippine Islands (171434, 171875, 172419); 29 specimens of Philippine woods from Mindoro Island (172061).

LAMM, DONALD W., A. P. O., Miami, Fla.: 7 birds from Brazil (171322).

LAMORE, D., Silver Spring, Md.: 37 rodents, collected by donor at Silver Spring (171724, 172393, 173348).

LANDERS, BERTHA, Dallas, Tex.: 28 etchings and lithographs by donor for special exhibition (172433, loan).

LANDO, Lt. (jg) ROBERT ELLIS, Washington, D. C.: 146 mollusks; insects, crustaceans, fishes, and plants (171315); 4 dragonflies and 105 mollusks from Florida (171503); 110 marine shells from Miami, Fla. (172052); 168 land, fresh-water, and marine shells and a small collection of barnacles from Florida (172315).

LANE, Dr. JOHN, São Paulo, Brazil: 94 specimens of mosquito material comprising 61 pinned adults and 29 slides of Neotropical mosquitoes, and 4 pinned paratypes of 1 species (171152).

LANE, Lt. P. H., San Francisco, Calif.: 2 plants from Japan (171767).

LANGFORD, DANIEL B. (address unknown): 89 fresh-water mussels from Arkansas (167283).

LASKY, WILLIAM R., Denver, Colo.: 30 mosquitoes from Colorado (173131).

LAVERS, MRS. AUDREE, Seattle, Wash.: 84 water mites, representing 27 species, 11 of which are represented by 27 paratypes, collected and described by the late C. H. Lavers, Jr. (171702).

LEADBETTER, MRS. GUY W., Washington, D. C., (See under Estate of Dr. Guy W. Leadbetter.)

LEADBETTER, ESTATE OF Dr. GUY W.: (Through Mrs. Guy W. Leadbetter) A mounted head of Newfoundland caribou (172040).

LEE, D. J., Sydney, New South Wales: 69 mosquitoes, representing 16 species, 5 of which are represented by 10 paratypes (171942); (through Lt. Col. W. V. King) 25 slides of mosquito material (172479).

LEE, Capt. DUDLEY P., Springfield, Va.: 25 photomicrographs in color from 3 separation negatives utilizing polarized light, made by the "Triak Color Process," exhibited July 1945 (170782, loan); 7 color photographs by Triak process, invented by donor (172759).

LEECH, HUGH B. (See under Canadian Government, Department of Agriculture, Dominion Entomological Laboratory.)

LEESON, H. S. (See under London School of Hygiene and Tropical Medicine.)

LEGRAND, Dr. DIEGO, Montevideo, Uruguay: 10 ferns from Uruguay (161504, exchange).

LEITE, JOSÉ EUGENIO, São Paulo, Brazil: 10 specimens of ferns from Brazil (171869); 60 ferns from Brazil (172895, exchange).

LÉON, Rev. Brother, Vedado-Habana, Cuba.: 37 plants from Cuba (171438); 15 grasses from Cuba (171518).

LEONARD, E. C., Washington, D. C.: 100 plants from Maryland (172097).

LEVER, R. A., Suva, Fiji Islands: 7 specimens of mosquito material (172391).

LINCK, ROBERT C., Philadelphia, Pa.: 1 specimen of salesite from Chuquicamata, Chile (171139).

LINDSEY, Prof. ALTON A., Albuquerque, N. Mex.: 25 amphipods from permanent ponds in tube cavern sink-holes in central New Mexico (171380).

LINSLEY, Dr. E. GORTON. (See under University of California.)

LINSLEY, Capt. L. N., U. S. N., Washington, D. C.: A bow and 8 arrows from the Negritos of the Zambales Mountains of Luzon, Philippine Islands, collected by the donor in 1939 (173178).

LITTLE, Dr. ELBERT L., Jr., Washington, D. C.: 44 ferns from Colombia (170805); 210 plants from Chiapas, Mexico (172725).

LITTLE, LAURA REVERE, Brookline, Mass.: Jacquard-figured, pictorial silk-and-wool fabric commemorating the Centennial of the Independence of the United States (173191).

LITTLE MUSEUM, Lansdowne, Md.: (Through J. A. Holloman, Jr.) 1 specimen of fossil wood from the Potomac formation at Elkridge, Md. (171493).

LLANO, RAUL J., Bolivar, Argentina: 4 butterflies from Argentina (172206).

LLOYD, HOYES. (See under Lloyd Collections.)

LLOYD COLLECTIONS, Ottawa, Ontario: (Through Hoyes Lloyd) 26 bird skins from eastern Canada (172292).

LOCKE, Mrs. J. G., Washington, D. C.: A wedding outfit and accessories of the year 1894 and a white silk handkerchief of 1886 (173132).

LOCKLIN, CHARLES R., Detroit, Mich.: 15 fossil shells from Florida (173263, 173345).

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE, London, England: (Through Prof. P. A. Buxton and H. S. Leeson) 60 Oriental and Australian mosquitoes (172099, exchange).

LOWELL, Prof. WAYNE RUSSELL. (See Montana State University.)

LUTZ, Dr. BERTHA, Rio de Janeiro, Brazil: 5 frogs from Brazil (171415, exchange).

LYMAN, FRANK, Lantana, Fla.: 5 mollusks from Florida (171274, 172122, 172156).

MACARTHUR, Mrs. W. E., Jacksonville, Fla.: 2 plants from Florida (171595).

MACCORD, Maj. HOWARD A., Washington, D. C.: 17 land and fresh-water shells from Georgia Indian sites (170779); 19 Neolithic (?) potsherds from an exposure on the right bank of Leine River, just south of Haisede, near Hanover, Germany (171039). (See also under Seymour A. Abramowitz.)

MACCORD, Maj. HOWARD A., and CARL P. MANSON, Washington, D. C.: Potsherds of three types recognized at the Keyser Farm site, near Rileyville, Page County, Va. (171943).

MACKENZIE, Corp. K., A. P. O., San Francisco, Calif.: 1 spider (172143).

MACMASTER, Mrs. F. A., Los Altos, Calif.: United States silk flag flown by a New York regiment during the battle of Fredericksburg, Va., December 13, 1862 (172413).

MACY, Prof. RALPH W., Portland, Oreg.: 9 mollusks from Bakeoven Creek, Wasco County, Oreg. (171272).

MAFFEN, HERBERT C., F. P. O., San Francisco, Calif.: 2 mollusks from Marshall Islands (171355, 171525).

MAGNUS, HARRY C., West Palm Beach, Fla.: 2 pieces of wood containing about 25 wood-boring mollusks (171935).

MAGNUSSON, HARRIS W. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

MAHONEY, Capt. and Mrs. MICHAEL, Harpers Ferry, W. Va.: 1 16-mm. Keystone Kinescope Projector, Model E-32, and 1 reel, Charley Chaplin in "Skip the Puddles" (171948).

MALAISE, Dr. RENÉ, Stockholm, Sweden: 1 sawfly (172779).

MALKIN, Pfc. BORYS, A. P. O., San Francisco, Calif.: A collection of miscellaneous insects from Dutch New Guinea made by the donor, Pfc. Ed. Held, Stanley Jewett, Jr., and Lt. H. Hoogstraal (170444); 1 collection of miscellaneous insects from New Guinea, Morotai, and Luzón (171085); a small collection of insects from the Philippines (171485, 171854, 172198).

MANSON, CARL P., Washington, D. C.: Bone and stone implements from Adak Island, Andreanof Group, the Aleutians, Third Judicial Division, Alaska (172294). (See also under Maj. Howard A. MacCord.)

MANTER, Prof H. W., Lincoln, Nebr.: 4 slides of trematodes, including 2 types and 2 paratypes (170537); types of 2 trematodes (171191).

MARBLE, Dr. JOHN P., Chevy Chase, Md.: 1 specimen of mineral from Marysvale, Utah (173073).

MARIE CAROLINE, Sister, Key West, Fla.: 3 mollusks (169959).

MARITIME COMMISSION, U. S., Washingington, D. C.: (Through J. M. Winston) 6 scale models of steamships, U. S. Maritime types, period of World War II (170015).

MARKS, ELIZABETH L., Brisbane, Queensland: 10 mosquitoes (6 adults, 4 larvae) (171938).

MARSH, F. W., Washington, D. C.: Copy of the Holy Bible, with the Apocrypha, published by B. B. Mussey, Boston, 1842 (171865).

MARSHALL, ERNEST B., Laurel, Md.: 21 muskrats, 3 opossums, 1 skunk, 1 weasel, and 3 raccoons taken near Laurel by the donor (170919).

MARTÍNEZ, Prof. MAXIMINO, Morelia, Michoacán: 51 plants from Mexico (171250); 5 wood specimens from Mexico (173385).

MARY CORDE, Sister, Maryknoll, N. Y.: 2 mollusks from the Canal Zone (171092).

MASON, Mrs. ILA J., Leitchfield, Ky.: 19th-century American lidded majolica jar (171480).

MASTA DISPLAYS, New York, N. Y.: 7 examples of silk-screen color printing and 1 duplicate, the work of Masta Displays (170869).

MATHÉ, Dr. CHARLES P., San Francisco, Calif.: 1 fish, "English sole," caught by donor in San Francisco Bay (172867).

MATHESON, Prof. ROBERT, Ithaca, N. Y.: 5 slides of flies (171760).

MATUDA, Prof. E., Escuintla, Chiapas: 326 plants from Mexico (172081, 173355).

MAZZOTTI, Dr. LUIS, Mexico, D. F.: 1 shrew collected at Sabinas, Coahuila (170311); 2 white-throated wood rats from Bocas, San Luis Potosí (170975).

MCBURNEY, Lt. (jg) JOHN T., F. P. O., San Francisco, Calif.: 66 fishes and hermit crabs from Kerama Retto in the Okinawa Gunto, collected by donor during July 1945 (171082); collection of fishes, mollusks, crustaceans, and reptiles from Saipan, Marianas Islands (171312).

MCCALLUM, LEROY M., Jr., Laguna Beach, Calif.: Model of Seversky airplane, P-35 (172622, loan).

MCCORMICK-GOODHART, LEANDER, Hyattsville, Md. (See under Prof. Sir Geoffrey Callender.)

MCCOY, Lt. Col. O. R. (See under War Department, Office of the Surgeon General.)

MCCRARY, O. F., Raleigh, N. C.: 1 plant from eastern United States (170710).

MCCULLOCH, Dr. IRENE. (See under University of Southern California, Allan Hancock Foundation.)

MCDONALD, Pfc. EDWARD D., Jr., Shaker Heights, Ohio: 266 plants from Georgian Bay region, Canada (171806).

MCDOUGALL, Mrs. ELSIE, Bearsville, N. Y.: Larval nest of a gregarious butterfly and strips of silk removed from tent or "bolsa" of a gregarious silk spinner, both from Mexico (172396); yellow, pierced cocoons of the mulberry silkworm raised by Zapotic Indians at San Francisco Cajonas, Mexico; a ball of spun silk yarn and part of a silk sash (172977).

MCFARLAND, Prof. FRANK T., Lexington, Ky.: 20 plants from Kentucky (172297, exchange).

MCGUFFIN, FRANK L., Washington, D. C.: 3 Gaspar color prints (172347).

MCGUIRE, W. C., Houston, Tex.: 1 whale skull from an animal washed ashore on the Gulf beach of St. Joseph Island, Aranasas County, Tex., in May 1940 (171761).

MCKEE, BENJAMIN HARRISON, and Mrs. MARY MCKEE REISINGER, Greenwich, Conn.: Inaugural Ball dresses of Mrs. Benjamin Harrison and her daughter, Mrs. J. R. McKee, worn in 1889 and dress worn by Mrs. Harrison during the period of President Harrison's administration as President, 1889–1893 (170780).

MCMANUS, JOHN J., Detroit, Mich.: Rotol electric proportional governor for airplanes (172065).

MCMASTER, Lt. JOHN, F. P. O., San Francisco, Calif.: Specimen of analcite from Guam (171494).

MCMILLEN, Pvt. JACK R., A. P. O., New York, N. Y.: 20 plants from Burma (170962, 172469).

MCVAUGH, Dr. ROGERS. (See under U. S. Department of Agriculture, Bureau of Plant Industry, Soils, and Agricultural Engineering.)

MCVICKER, Lt. (jg) J. JAY, F. P. O., New York, N. Y.: 19 aquatints and 18 drawings for special exhibition during October 1945 (171459, loan).

MEDCOF, J. C., St. Andrews, New Brunswick: 10 amphipods from New Brunswick (170737).

MELA, HARRY F., Pelham Manor, N. Y.: 1 "Junior Marvel" self-filling fountain pen, old style, with 2 old pen points (171873).

MELL, Dr. C. D., New York, N. Y.: 25 plants from Mexico (171021).

MERCK & Co., INC., New York, N. Y.: 8 photographs, 16 transparencies, 8 minerals, and 8 specimens of medicines arranged in an exhibit to illustrate important mineral kingdom contributions to materia medica (171066).

METROPOLITAN CAMERA CLUB COUNCIL, Davenport, Iowa: 75 pictorial photographs for special exhibition during January 1946 (172134, loan).

MEXICAN GOVERNMENT, *Department of Agriculture.* San Jacinto, D. F.: (Through Ing. Dario L. Arrieta M.) 2 weevils from Mexico (170607); a small collection of beetles collected in Mexico by Juan Romero H. (171594).

Oficina Fitosanitaria, Veracruz, Veracruz: (Through Jesús Mendoza Vargas) 24 insects from vanilla plants in Mexico (169880, 170359).

MICHIGAN, UNIVERSITY OF, *Museum of Zoology*, Ann Arbor, Mich.: (Through Dr. Reeve M. Bailey) 34 fishes from Venezuela, collected by Dr. F. F. Bond in 1938–39 (168602); 54 fishes from Guatemala (171457); 2 fishes from Laguna de Alchichica, Puebla, Mexico, collected from Fernando de Buen, 1941 (paratypes) (171664); 150 fishes from City Creek, San Bernardino County, Calif. (171946, exchange).

MILES, CECIL, Mariquita, Colombia: 13 fishes from the Magdalena River, Colombia (172162).

MILES, Capt. V. I., Fort McPherson, Ga.: 527 mosquitoes from the vicinity of Ledo, Assam, India (170657). (See also under War Department, Fourth Service Command Medical Laboratory.)

MILLER, GERRIT S., Jr., Washington, D. C.: 2 gray squirrels collected in Washington, D. C. (170781); 2 shrews and 1 lot of reptiles (171909).

MILLER, PAUL A., Alexandria, Va.: A wood-turning lathe (172621).

MILLER, RALPH G., Van Nuys, Calif.: 2,206 fishes, tree toad, snake, and mollusks, collected in the Santa Clara River, Los Angeles County, and Sentenac Canyon, San Diego County, Calif., by the donor; also experimentally raised fish (170987); 3,031 fishes, 2 frogs, 1 insect from streams of southern California (171289).

MILLER, Lt. RICHARD G., Washington, D. C.: 2 toads, 7 lizards, and 5 fishes from islands in the Pacific (171193).

MILLER, Dr. ROBERT R., Arlington, Va.: 3,825 fishes (selected series) from tributaries of the Potomac River in Maryland (171044); 100 fishes from Lucky Run, tributary to Four Mile Run, Fairfax County, Va. (172064).

MILNER, Lt. P. K., Washington, D. C.: 1 colony of Ordovician coral from near Knoxville, Tenn. (170654).

MINISTERIO DE AGRICULTURA Y COLONIZACIÓN, La Paz, Bolivia: A small collection of insects from Bolivia (171599).

MISNER, ERNEST L., Washington, D. C.: 5 marine shells from Plum Channel, Gerrittsen Beach, Brooklyn, N. Y. (170749).

MISSISSIPPI, STATE PLANT BOARD OF, State College, Miss.: (Through Gladys Hoke) 30 isopods (100757).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 132 plants from Maine and Texas (170723, exchange).

MITCHELL, CORNELIUS, New York, N. Y.: 3 parasitic copepods (170760).

MITCHELL, Col. R. L., Washington, D. C.: 4 crystals from St. Anstell, Cornwall, England, and from the Camaroons, Africa, and 17 fossils from England (172550, exchange).

MODERN PLASTICS INC., New York, N. Y.: 52 specimens illustrating recent utilization of 11 synthetic plastics; also a copy of the "Modern Plastics Catalog for 1945" (173387).

MOLDENKE, Dr. HAROLD N., New York, N. Y.: 45 grasses from Middle Atlantic States (170835, 171127, 171335).

MONTANA STATE UNIVERSITY, Missoula, Mont.: (Through Prof. Wayne Russell Lowell) 202 types and figured specimens of Middle Cambrian brachiopods and 165 types and figured specimens of Middle Cambrian trilobites from Montana (170646).

MONTE, Dr. OSCAR, São Paulo, Brazil: 35 insects (14 beetles and 21 bugs, the latter including 11 species) (171414, exchange); 117 insects (171662, exchange).

MONTERO O., Prof. GILBERTO, Temuco, Chile: 1 plant from Chile (171237).

MONTGOMERY, Lt. LENA R., A. P. O., San Francisco, Calif.: 1 butterfly (170829).

MOORE, Capt. BYRON, Morgantown, W. Va.: A drum and a club from northeastern New Guinea, collected by donor (172688).

MOORE, EMMELINE, New Haven, Conn.: 20+ mysids, 13 copepods, and 3 amphipods from the stomach of a flounder (170198).

MOORE, Ensign GEORGE C., Auburn, Ala.: 591 plants from Guam (172906, 173260).

MOORE, Dr. RILEY D. (See under Estate of Dr. Harry D. Vastine and Mrs. Marie Stern Walling.)

MORGAN, ALBERT, Rocky Hill, Conn.: Nest of Baltimore oriole (170644).

MORRISON, B. Y. (See under U. S. Department of Agriculture, Bureau of Plant Industry, Soils, and Agricultural Engineering.)

MOSTAJO, Dr. BENJAMIN, Lima, Peru: 1 rat and 1 squirrel from Peru (171911).

MUMA, Dr. MARTIN H., Lincoln, Nebr.: 2 spiders, paratypes of a new species (171394).

MÚÑOZ P., Dr. CARLOS, Santiago, Chile: 1 plant from Chile (170708).

MUNRO, J. A., Okanagan Landing, British Columbia: 81 mollusks from northern British Columbia, 2 conchostracans, and 2 insects (171658).

MUNRO, JEAN, Washington, D. C.: Four fragments of soapstone vessels, broken in process of manufacture, found at quarry site near Darlington, Md. (173219).

MURPHY, Col. JAMES B., Columbia, S. C.: 1 mounted platypus from Australia (172085).

MURRAY, Dr. J. J., Lexington, Va.: 6 bird skins from Lexington, Va. (171473, 172226). (See also under Rev. John Gray.)

MURRILL, Dr. W. A., Gainesville, Fla.: 12 plants from Florida (171553, 171796, 172942).

MUSÉUM NATIONAL D'HISTOIRE NATURELLE, Paris, France: (Through Dr. Louis Fage) 1 crustacean (171832, exchange).

MYERS, GEORGE HEWITT, Washington, D. C.: 8 keris and 1 chopping knife from Java (169512).

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: 3 fragments of Bryozoa (171969).

NATURAL HISTORY MUSEUM, San Diego, Calif.: (Through E. B. Higgins) 1 plant from California (170671).

NATURHISTORISKA RIKSMUSEET, Stockholm, Sweden: (Through Dr. Th. Arwidsson) 255 plants, mostly from tropical America (171160, exchange); 8 photographs of Asiatic plants (171762, exchange).

NAVY DEPARTMENT, Washington, D. C.: 10 small mammals forwarded by Malaria and Epidemic Control Unit No. 16 (172140).

Bureau of Aeronautics, Washington, D. C.: 19 model Navy airplanes of the period just after World War I, including exhibition cases for same (171119).

Bureau of Ships, Washington, D. C.: (Through Lt. E. F. Carlston) 25+ barnacles from the vicinity of Okinawa (170918).

Bureau of Supplies and Accounts, Washington, D. C.: 75 study samples of various textile fabrics used by the Naval Forces in World War II (172665).

Bureau of Yards and Docks, Washington, D. C.: 2 models of official Seabee insignia (172178).

National Naval Medical School, Bethesda, Md.: 30 fresh-water and marine shells from New Guinea (170570); 50 mollusks from Tarakan, Borneo (170870); 6 rats forwarded by Lt. M. S. Johnson from Hawaii (170875); 250 mollusks (170910); 9 rats and 4 shrews from Okinawa, forwarded by Lt. T. B. Murray (170989); 11 rodents (171466); 20 bats, 7 rats, 27 birds, 38 reptiles, insects, and 40 snails forwarded by Lt. (jg) Arthur K. Crews and collected by T/5 A. J. Nicholson, under command of Lt. John Burke (171606); 134 bird skins, 1 egg, and 1 bird in alcohol from Palau and Guam Islands (171628); 337 mammal specimens; collection of 596 birds skins, 1 bird in alcohol, and 3 birds nests and eggs, 51 fishes; insects, marine invertebrates, reptiles, 238 mollusks, 404 plants, echinoderms (171693); 8 snails from Island of Kyushu, Japan (171791); 1 spider from Parry Island, Eniwetok, Marshall Islands, collected November 15, 1945, by M. M. Mansuy (171908); 27 rodents forwarded by Lt. (jg) Jesse E. Barker (172083); 15 rodents forwarded by Lt. T. B. Murray H(S), U. S. N. R., (172181); 13 rodents forwarded by Lt. (jg) L. E. Ulbrich (172362).

Naval Clothing Depot, Brooklyn, N. Y.: U. S. naval insignia of World War II (172212).

Naval Medical Research Unit No. 2, Bethesda, Md.: 350 plants from Guam, 21 sea-urchins, 1 starfish, 1 sea-cucumber, and 1,860 fishes from the south Pacific; also mollusks and 15 lizards (171477); 427 bird skins, 13 birds in alcohol, 4 nests and eggs; 321 mammal skins, 370 mammal skins, 370 mammal skulls, 7 bats in alcohol; 288 reptiles; 7 corals; 13 mollusks; 431 miscellaneous invertebrates; 3 fishes; 6 insects, from islands in the Pacific Ocean (170990); 1 water-buffalo skull; 382 land and marine mollusks; 5 vials of parasitic worms from Guam; 394 slides of chiggers and 135 vials of miscellaneous insects from the Marianas; 277 plants from Guam; 1 echinoderm (171261); (through Lt. R. M. Bohart) 57 specimens of mosquito material collected on Okinawa (171622); 23 reptiles, 1 fish, and 6 insects collected by Lt. Comdr. K. L. Knight at Osmena, Samar, Philippine Islands, during June–August 1945 (172092); miscellaneous biological specimens from Okinawa and Guam (172150); (through R. H. Baker) collection of miscellaneous insects, crustaceans, mollusks, worms, and echinoderm, collected by donor and others on Pelelieu, Guam, Ulithi (172713); (through Lt. George W. Wharton) 565 vials and 3,357 slides of ectoparasites and miscellaneous arthropods (172913); (through Commodore Thomas M. Rivers) approximately 1,775 fish specimens from Rota and Guam, Marianas, collected by Ensign David G. Frey between October 16 and November 26, 1945 (172943); (through Lt. Comdr. K. L. Knight, Lt. L. C. Rozeboom, and Jean L. Laffoon, Ph. M. 1/c)

450 specimens of mosquito material collected in the Pacific Islands (172976); (through Lt. Comdr. K. L. Knight, Lt. R. M. Bohart, and Lt. R. L. Ingram) 1,251 adult insects, representing 41 species, and 113 slides and 35 vials of larvae of mosquitoes, collected in the southwest Pacific (173168); (through Ph. M. 1/c Jean L. Laffoon) 2,308 mounted Diptera, 24 small boxes of unmounted Diptera, and 16 small boxes of unmounted miscellaneous insects (173203); (through Lt. G. E. Bohart and Lt. J. L. Gressitt) a collection of miscellaneous insects from Guam and a few from Luzón, Okinawa, and Honshu (173267).

NEILL, M. AGNES, Washington, D. C.: 2 pairs of children's kid gloves of the latter part of the 19th century; a gentleman's white embroidered vest of the early part of the 19th century; a locket with tintype portraits, 1862 (173076).

NETTING, M. GRAHAM. (See under Carnegie Museum.)

NEW MEXICO STATE COLLEGE, State College, N. Mex.: 1 cultivated plant from New Mexico (171264).

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 1 plant collected by P. Wilson in Cuba (171019, exchange); 2 plants from Cuba (171124, 172079, exchange); 73 plants from Utah (171644, exchange); 93 plants from Surinam and British Guiana (171654, 171721, 172020, 172530, 172896, exchange); 244 plants (172756, 172758, exchange).

NEWELL, Prof. NORMAN D., New York, N. Y.: Specimen of Jurassic brachiopod from Africa (173038, exchange); 35 Pennsylvanian, Permian, and Triassic fossils from western United States (173128).

NICHOLSON, DONALD J., Orlando, Fla.: 2 birds (171128).

NICOL, DAVID, Stanford University, Calif.: Paratype of mollusk from the Miocene of the Panama Canal Zone (172053).

NIGERIAN GOVERNMENT, *Chief Conservator of Forests*, Ibadan, Nigeria: 19 plants from the Forest Herbarium, Ibadan, Nigeria (172813).

NININGER, H. H., Artesia, N. Mex.: 12 mollusks from New Mexico (171035).

NIXON, Dr. G. E. (See under British Government, British Museum of Natural History.)

NORTHROP, Prof. STUART A., Albuquerque, N. Mex.: 3 types of cephalopods from the Permian Chupadera formation of New Mexico (171859, exchange).

O'CONNOR, Lt. BILL, Worcester, Mass.: 25 fishes caught in July 1945 in lagoon and tidal pool, Peleliu, Palau (172256).

OHIO STATE UNIVERSITY, *Department of Zoology*, Columbus, Ohio: (Through Dr. Wilbur M. Tidd) 2 marine invertebrates (171468).

OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE, Stillwater, Okla.: 7 cultivated grasses (171573).

OLIVER-GONZÁLES, Dr. José. (See under University of Puerto Rico.)

OLMSTED, Dr. A. J., Washington, D. C.: 1 large, single-blade, spring scarificator, with case (171080); 1 magazine Cyclone Camera No. 2, made about 1900, holding 12 plates 3¼ by 4¼ inches (171458).

OLMSTED, Mrs. A. J., Washington, D. C.: A tintype mounted on a card-de-visite, new to the collection (173388).

OLSON, Maj. THEODORE A. (See under War Department, Eighth Service Command.)

O'NEILL, Father HUGH. (See under Catholic University of America.)

OREGON STATE COLLEGE, Corvallis, Oreg.: (Through Dr. Helen M. Gilkey) 1 grass from Oregon (170806). *Seafoods Laboratory*, Astoria, Oreg.: (Through Dr. E. W. Harvey) 1 fish (170521).

ORIENTAL INSTITUTE, Chicago, Ill.: Cast of an impression of a cylinder seal found at Tel Asmar (Eshnunra) about 50 miles northeast of Baghdad (171971).

ORPET, E. O., Santa Barbara, Calif.: 1 plant (172738).

ORTIZ, Dr. IGNACIO C., San Cristóbal, Venezuela: 1 tapeworm (172377).

OSGOOD, Mrs. CHARLES C., Kensington, Md.: A white muslin dress worn by Mehitabel Kenrick on the occasion of her marriage in 1814 to Abisha Samson, both of Newton, Mass.; a triangular scarf and an infant's dress (172637).

OSMENT, Capt. WILLIAM, Hollywood, Fla.: 31 mollusks from Cuba (170824).

OTIS, JAMES C., Jr., Montpelier, Vt.: Fish, crabs, mollusk, shrimp, eels, and shell from Guam; also 2 lizards, collected by donor between April and November 1945 (172379).

OVERBEEK, Dr. J. VAN. (See under University of Puerto Rico.)

OVERMANN, C. I., Birch Tree, Mo.: Specimen of Ordovician pelecypod from the Jefferson City formation in southern Shannon County, Mo. (172250).

OWEN, Lt. ROBERT I., Marboro, N. J.: 19 lizards and a collection of miscellaneous insects from the New Hebrides (172024).

PACKCHANIAN, Prof. A. (See under University of Texas.)

PALMER, DAVE, Manhasset, N. Y.: 30 late Silurian cystids (172054, exchange).

PALMER, Chaplain KENNETH L., U. S. N. R., Worcester, Mass.: Stone and shell implements from the islands of Saipan and Tinian, Marianas Group, Pacific Ocean (171754).

PARK, Capt. IRVING H., A. P. O., San Francisco, Calif.: 1 slide of a mite from a rat at Oro Bay, New Guinea (171192).

PARODI, Dr. LORENZO, Buenos Aires, Argentina: 17 plants from Argentina (171911); 16 grasses from Argentina (171517, exchange).

PAYNE, Dr. EUGENE H., Rio de Janeiro, Brazil: Small collection of miscellaneous insects, helminths, 2 centipedes, and 3 scorpions from Brazil (172114).

PEABODY, STUYVESANT, Chicago, Ill.: 41 pictorial photographs for exhibition during December 1945 (171947, loan).

PEARSON, JOHN C. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

PENN, Lt. GEORGE H., New Orleans, La.: 25 crayfishes, including type and paratype of one species (171464).

PENNOYER, Mrs. MARGARETTE WYATT. (See under Estate of Sophie P. Casey.)

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION, Harrisburg, Pa.: 10 miscellaneous bones from archeological excavation in southwestern Pennsylvania (162383).

PENNSYLVANIA STATE COLLEGE, State College, Pa.: 21 grasses from Pennsylvania (171478, exchange).

PENNSYLVANIA, UNIVERSITY OF, Philadelphia, Pa.: (Through Richard W. Pohl) 5 grasses (172948, exchange).

PERKINS, Mrs. C. M. (See under Lt. Col. Charles E. Woodruff.)

PERKINS, J. U., Washington, D. C.: 1 Agfa flash lamp and 1 box of Victor flash powder (171743).

PERRY, K. M., Washington, D. C.: A small lot of Collembola, collected near Falls Church, Va. (170593).

PERRY, Dr. STUART H., Adrian, Mich.: 1 specimen of Livingston, Tenn., meteorite, weight 155 grams (163686); specimen of Dimmitt, Castro County, Tex., meteorite, weight 3,576 grams (170499); 1 slice of Pine River, Wis., meteorite (172158).

PERRYGO, W. M. (See under Smithsonian Institution, National Museum.)

PETRIDES, GEORGE A., Columbus, Ohio: 1 shrew (172739).

PHELPS, W. H., Caracas, Venezuela: 9 birds from Venezuela (171247, exchange).

PHILADELPHIA CHILD HEALTH SOCIETY, Philadelphia, Pa.: 12 charts interpreting food values (172432).

PHILBRICK, OTIS, Westwood, Mass.: 35 lithographs by the donor for special exhibition (172562, loan).

PHILIP, Lt. Col. CORNELIUS B. (See under United States of America Typhus Commission.)

PHILLIPS, CHARLIE A., Aladdin, Wyo., Young adult female Indian skull, lacking face and lower jaw, from northeastern Wyoming (171471).

PHILLIPS, Prof. WALTER S. (See under University of Arizona.)

PHOTO UTILITIES, INC., New York, N. Y.: (Through Joseph M. Bing) 1 Display Justophot visual exposure meter, 1 Display Expophot visual exposure meter, and 1 Display Mini electric exposure meter (172783).

PHOTOGRAPHIC SOCIETY OF AMERICA, Philadelphia, Pa.: 94 salon prints, 9th annual show of the Society, August 10 to 26, 1945 (171043, loan).

PICKEL, Dr. D. BENTO, São Paulo, Brazil: 46 grasses from Brazil (173246).

PITTIER, Dr. H., Caracas, Venezuela: 97 plants from Venezuela, mainly collected by Dr. T. Lasser (169802); 94 plants from Venezuela, collected by F. Cardona (171281); 11 photographs of plants from Venezuela (172299).

PIZZINI, ANDREW, Washington, D. C.: 3 beetle larvae, 100+ amphipods, 2 isopods, and 4 flatworms (170502); 140 fresh-water amphipods collected in Gloucestershire, England (170972).

PLETSCH, Capt. DONALD J., A. P. O., San Francisco, Calif.: 284 fresh-water snails from Leyte, Philippine Islands (171365).

PLUGGE, JOHN A., Chevy Chase, Md.: 1 pink sapphire pendant weighing 6.19 grams (171062, loan).

POHL, RICHARD W. (See under University of Pennsylvania.)

POLAROID CORP., Cambridge, Mass.: 5 three-dimensional Polaroid Vectographs and a new kind of stereograph, operated by means of polarized light (172301).

POND, CAROLINE, Washington, D. C.: Prehistoric water jar, probably from the Rio Puerco drainage, Apache County, Ariz., and 2 photographs taken at Zuñi Pueblo, New Mexico, in 1891 and 1896 (172584).

POPULAR PHOTOGRAPHY, New York, N. Y.: 83 pictorial photographs for special exhibition (172532, loan).

PORTER, Prof. C. L. (See under University of Wyoming.)

POST, E. J., Tampa, Fla.: 5 recent shells and 4 fossil shells from Florida (170735).

POST OFFICE DEPARTMENT, Washington, D. C.: 8 sets of specimen stamps, 1,547 specimens received from the International Bureau of the Universal Postal Union (170602, 170909, 171257, 171357, 171679, 172071, 172705, 172786); 66 stamps of Russia received from the Postal Administration of the U. S. S. R. (170909, 171465); 9 stamps from the International Office of the Postal Union of the Americas and Spain (171257, 171465); 3 specimens each of the 1-cent and 3-cent Roosevelt and 3-cent Iwo Jima Commemorative stamps (171361); 3 copies each of 2-cent Roosevelt Memorial and 3-cent Army Commemorative stamps (171788); 3 copies each of Alfred E. Smith, U. S. Navy, and U. S. Coast Guard 1945 stamps (172069); 1 6-cent Canal Zone airmail stamp (172572); 3 copies each of Texas 3-cent commemorative, 5-cent Roosevelt, and 3-cent Merchant Marine stamps (172810); 1 5-cent Canal Zone stamp (173046).

POTTER, Prof. G. E., Mayagüez, Puerto Rico: 158 mollusks from Puerto Rico (169948).

POTZGER, Prof. J. E. (See under Butler University.)

PRATT, HARRY D. (See under Federal Security Agency, U. S. Public Health Service.)

PRATTE, PAUL K., St. Louis, Mo.: 37 pictorial photographs for special exhibition during April 1946 (172777, loan).

PRETTYMAN, ESTATE OF LILY MORGAN: (Through Ruth H. Prettyman) Howe sewing machine (Serial No. 301121) made about 1874 in Bridgeport, Conn., by the Howe Machine Co. and owned by A. B. Stockwell and Levi S. Stockwell, sons-in-law of Elias Howe, Jr. (171040).

PRETTYMAN, RUTH H. (See under Estate of Lily Morgan Prettyman.)

PRINCETON MUSEUM OF ZOOLOGY, Princeton, N. J.: 5 bird skins from the New Hebrides, including 3 forms new to the collections (170389, exchange).

PROCTOR, JOHN L. (See under Mrs. Sarah Proctor Dole.)

PUERTO RICO, UNIVERSITY OF, Mayagüez, Puerto Rico: (Through Dr. Carlos E. Chardon) 1 plant from Barbados (170727); (through Dr. J. van Overbeek) specimen of plant from Puerto Rico (172669); (through Dr. José Oliver-Gonzáles) 265 slides of mosquito material, representing 22 species (171663, exchange).

QUESTEL, ADRIEN, Pointe-a-Pitre, Guadeloupe: 2 crabs and 12 casts of fossil shells (170944); 458 plants from Guadeloupe (172597, 172972).

QUICK, Sgt. HORACE F., Camp Patrick Henry, Va.: 2 birds from Unalaska (169281).

QUOTA CLUB INTERNATIONAL, INC., Washington, D. C.: (through Mrs. Elizabeth J. White) Copy of a Martha Washington china plate made by the Shenango Pottery Co. in 1932 (116950).

RABKIN, Dr. SAMUEL, Cincinnati, Ohio: 21 human fetuses and 9 sets of jaw sections, adult (173169).

RADFORD, Sqdn/Ldr. CHARLES D., Manchester, England: 34 specimens on slides of parasitic mites, representing 27 species by 28 paratypes (172712, exchange).

RANDEL, Pfc. HUGH WAYNE, Washington, D. C.: 21 reptiles and amphibians from Marion County, Fla., collected by donor in September 1945 (171835).

RANDOLPH, ORRIN, Lake Worth, Fla.: Cranial fragments recovered from sand mound near southern part of Lake Worth, Fla. (172068).

RAPP, F. W., Vicksburg, Mich.: 12 specimens of grasses (173161).

RAPP, WILLIAM F., Jr., Urbana, Ill.: 39 amphipods (173042).

RAPP, Mr. and Mrs. WILLIAM F., Urbana, Ill.: 253 amphipods (171808).

RAPPLEYE, Capt. HOWARD S., Washington, D. C.: 1 plant from Takoma Park, D. C. (171018).

RASETTI, Dr. FRANCO, Quebec, Quebec: 50 Ordovician brachiopods from the Trenton limestone of Quebec (172204, exchange).

REED, WILBUR, Grangeville, Idaho: A beetle from Espiritu Santos, New Hebrides (172580).

REEDER, JOHN, Cambridge, Mass.: 6 specimens of grass from the southwestern United States (173097).

REHDER, Dr. and Mrs. HARALD A., Washington, D. C.: 550 mollusks, 1 spider, and a small collection of Crustacea from eastern Maryland and Delaware (171276).

REINHARD, Dr. E. G., Washington, D. C.: 2 specimens of a rhizocephalid, 16 amphipods, and 1 isopod (172075).

REISINGER, Mrs. MARY McKEE. (See under Benjamin Harrison McKee.)

RENFRO, Mrs. J. H., Fort Worth, Tex.: 3 brachiopods from Pennsylvanian rocks at Kickipoo Falls, Tex. (172935).

RICKER, Dr. P. L., Washington, D. C.: 3 plants from the Shenandoah National Park (170813); double-cased, silver watch marked "Thos. Cartwright, London" (172776).

RICKETTS, E. F., Pacific Grove, Calif.: 36 shrimps, 11 schizopods, and 7 lots of barnacles (170809).

RIGGS, LAWRASON. (See under Mrs. James A. Wright.)

RILEY, JOHN C., Ayer, Mass.: 67 plants from Guadalcanal (171786).

RINGS, Lt. ROY W. (See under U. S. War Department, Fourth Service Command.)

RIPLEY, S. DILLON, Litchfield, Conn.: 85 bird skins from Ceylon (172159).

RIVERS, Commodore THOMAS M. (See under U. S. Navy Department, Naval Medical Research Unit No. 2.)

ROADS, KATIE M., Hillsboro, Ohio: 1 plant from Ohio (170971).

ROBERTS, H. R., Philadelphia, Pa.: 19 specimens of mosquito material from the Pacific Islands representing 4 species, 2 of them by 15 paratypes (172993).

ROBERTSON, GEORGE A., Richmond, Va.: (Through Wm. J. Stephenson) 3 invertebrate fossils of Devonian age from Helderberg limestone at Sinnit Cave, Pendleton County, W. Va. (near Sugar Grove) (171164).

ROCKEFELLER FOUNDATION AND THE CARLOS FINDLAY LABORATORY OF BOGOTÁ, Bogotá, Colombia: (Through Dr. Charles R. Anderson) 8 rodent skins and skulls from Colombia (171256).

International Health Division, Rio de Janeiro, Brazil: (Through Dr. Henry W. Kumm) 19 pinned adults and 41 slides of mosquito material (172752).

RODGERS, Capt. VERNON L., Winters, Tex.: Costume and hand-worked silver jewelry of a Bali woman of high rank; also an Acca woman's costume of blue cotton cloth, necklaces, decorative headdress, and basketry reticule, obtained by donor while stationed in the north sector of Southern Shan States, China (173383).

RODOCK, ROY E., Lewiston, Idaho: 14 bugs (171495).

ROEBLING FUND, Smithsonian Institution: 1 specimen of zincite from Franklin, N. J., weighing 12.32 carats (171075, part exchange); 1 enstatite, weighing 8.08 carats (171452); 1 chrysoberyl from Ceylon weighing 120.45 carats (171640); 3 mineral specimens from Mexico (172287); a collection of 10 minerals from the United States, England, New South Wales, Argentina, etc. (173110); specimen of diaboleite from Mammoth mine, Ariz. (173264). (See also under Ward's Natural Science Establishment.)

ROGERSON, CLARK T., Ogden, Utah: 173 plants from the Philippines (171236, 171506, 172234).

ROHRER, JOSEPHINE A., Washington, D. C.: An open-face gold watch, engraved "George Haight, No. 7532" (172792).

ROLLER, JANE. (See under U. S. Department of Agriculture, Office of Foreign Agricultural Relations).

ROOSEVELT WILDLIFE FOREST EXPERIMENT STATION, Syracuse, N. Y.: (Through Wilford A. Dence) 2 mollusks from the Adirondack Mountains (172151).

RORKE, MARGARET HAYDEN. (See under Textile Color Card Association of the United States.)

ROSENGURTT, Dr. BERNARDO, Estación Juan Jackson, Uruguay: 60 plants from Uruguay (171389, 172082, 172094, 173261); 41 plants from Uruguay (171604, 172735, exchange).

ROSS, Dr. EDWARD S., San Francisco, Calif.: 15 adult mosquitoes, representing 4 species, 2 of them by 7 paratypes, from the Pacific Islands (172994).

ROSS, Dr. HERBERT H. (See Illinois State Natural History Survey Division.)

ROTH, Capt. LOUIS M., A. P. O., San Francisco, Calif.: 5 slides of larvae and pupae of mosquitoes (171345); 49 slides of larvae, pupae, and adults of mosquitoes from Okinawa (171758); 63 mosquitoes from Okinawa (172354).

ROYAL BOTANIC GARDEN, Edinburgh, Scotland: 279 plants, chiefly from the British Isles (173273, exchange).

ROYAL BOTANIC GARDEN, Sibpur, India: 26 plants from Burma (173051, exchange).

ROYBAL, Prof. JOSÉ, Monterrey, Nuevo León; 140 Mexican plants (172418, 173071).

ROZEBOOM, Lt. L. C. (See under Navy Department, Naval Medical Research Unit No. 2.)

RUBBER DEVELOPMENT CORP., Fortaleza-Ceará, Brazil: (Through Dr. Hugh C. Cutler) 13 ferns from Brazil (171086).

RUDD, VELVA E., Washington, D. C.: 1 plant (*Mimosa*) (171688).

RUNYON, ROBERT, Brownsville, Tex.: 26 plants from the United States (171001, 173089).

ST. LOUIS POST-DISPATCH, St. Louis, Mo.: 1 copy of the St. Louis Post-Dispatch rotogravure section, "Pictures," for August 12, 1945, claiming to be the first rotogravure reproduction of a color picture transmitted by radio; 1 duplicate copy (171235).

SALTER, W. E., Washington, D. C.: 1 mussell from the Anacostia River (171757).

SAMPSON, Prof. A. W., Berkeley, Calif.: 14 grasses from the South Pacific region (171501).

SANDERS, Dr. J. G., Washington, D. C.: 56 lots of insects collected in North Africa, Syria, Iraq, and Iran (170672); 24 specimens of fancy woods collected by donor at Fundo Sinchono, near Tingo María, Peru (171142).

SARGENT, F. H., Washington, D. C.: 2 plants from eastern United States (172132).

SAWAYA, Dr. PAULO, São Paulo, Brazil: 20 amphibians from Bertioga, São Paulo collected by donor (172663).

SCATTERGOOD, LESLIE W., Boothbay Harbor, Maine: 12 mollusks from Maine (172973).

SCHAUL, Mrs. MARIE LEVY, Coatesville, Pa.: Swords and miscellaneous relics of the period of the Civil War (172699).

SCHELLBACH, LOUIS. (See under U. S. Department of the Interior, National Park Service.)

SCHIEFER, Dr. HELEN, Bogotá, Colombia: 17 plants from Colombia (170867).

SCHOLS, H., Paramaribo, Surinam: 4 lots of gibbsite from Paramaribo (170798); 2 specimens of gibbsite, casts of roots or stems of grass or grasslike plants (171704).

SCHRAG, KARL, New York, N. Y.: 33 prints consisting of etchings in various combinations and 1 lithograph for special exhibition from October 29 through November 25, 1945 (171556, loan); 1 aquatint, "Solace," by the donor (172654).

SCHULTZ, JAMES B. (See under Dr. Carl L. Hubbs.)

SCHWARZ, CHARLES R., Milwaukee, Wis.: (Through Mrs. Robert W. Essex) 1 Thomson-Houston incandescent lamp and socket, marked "Pat. Mar. 5 01," socket marked on bottom, "B. E. Co. 15 N." (170757).

SCHWENGEL, Dr. JEANNE S., Scarsdale, N. Y.: 1 mollusk, paratype (171661); 1 mollusk from Japan (172314).

SCULLY, Dr. FRANCIS J., Hot Springs, Ark.: 85 plants from Arkansas 173157).

SEAMAN, ELWOOD A., Wheeling, W. Va.: 2 specimens of mosquito material from California (172390).

SEIBERT, Dr. R. J., Lima, Peru: 19 grasses from Peru (172515).

SEMPLE, ARTHUR T., Washington, D. C.: 7 plants from Tanganyika (171265); 11 grasses from Nicaragua (172778).

SEXTON, Mrs. E. W., Plymouth, England: 76 amphipods (172970, exchange).

SHANNON, RAYMOND C., Coral Gables, Fla.: 125 insects, 120 flies, and 5 Lepidoptera (160975, bequest).

SHAW, Lt. GEORGE F. (See under Corp. Robert B. Browne.)

SHEAR, Dr. C. L., Arlington, Va.: 200 Miocene mollusks from Maryland; 33 specimens of marine mollusks from Ireland; 6 invertebrate fossils and 4 pieces of petrified wood (170491).

SHEFFIELD CORP., Dayton, Ohio: A collection of 4 historic Sheffield precision gauges and accessories as follows: Precisionaire, 1940, Multichek, 1939, Visual, 1930, Electrichek, 1929, and 2 samples of 37-mm. shell parts such as measured by "Multicheck" at Frankford Arsenal (4 specimens) (170653).

SHELFORD, Prof. VICTOR E., Champaign, Ill.: A collection of insects (169989); 15 plants from the Great Basin region (171183).

SHENK, RICHARD W., Washington, D. C.: Specimen of fungus from the District of Columbia (173272).

SHEPPARD, Lt. RAYMOND R., Washington, D. C.: 67 ethnological specimens from Angel Island, off the north coast of New Guinea, collected by donor in 1944 (171945).

SHOEMAKER, CLARENCE R., Washington, D. C.: 1 Cape May warbler (171726).

SHOPE, Comdr. R. E., F. P. O., San Francisco, Calif.: 193 mollusks from Okinawa, Ryukyu Islands (170794).

SHROCK, Prof. ROBERT R., Cambridge, Mass.: 425 fossil invertebrates from Kentland Area, Indiana (172548); 250 fossil invertebrates from Europe, 60 specimens of Silurian fossils from Wisconsin, and 250 Devonian and Mississippian invertebrates from Mississippi and Alabama (172549).

SIDNEY, CEDRIC, Durham, N. C.: 87 ferns from Assam and Burma (172313).

SIGAFOOS, Mrs. ROBERT S., Columbus, Ohio: 54 plants from New Guinea (170627).

SIMON, Lt. JAMES R., Cheyenne, Wyo.: 338 fishes from the South Pacific (172063); 18 fishes from Okinawa (172728).

SIMPSON, Mrs. ROXIE C., Washington, D. C.: 5 birds (172129); 1 young cardinal (173269). (See also under Dr. C. S. Brimley.)

SIMPSON, Mrs. WALTER. Washington, D. C.: A late 18th-century, English, monochrome cotton print, handblocked in a classical, heraldic motif, using "pique" work or pinning, in the form of tiny dots, as a filler for small

background areas, which was an outstanding development of this period (170837).

SKINNER, WILLIAM, & SONS, New York, N. Y.: 7 specimens of all-nylon taffeta, twill, and satin fabrics, together with 3 applications, and 5 examples of wool-backed, viscose rayon poplin, serge, and satin materials (172805).

SLATTERY, R. G., Washington, D. C.: 4 more or less complete skeletons from the R. G. Mitchell site, located on the left bank of the north fork of the Holston River, ¼ mile north of the Nordyke Bridge, Washington County, Va. (171764); a miscellaneous lot of skull fragments and bones from Feurt site, located 5 miles north of Portsmouth, Scioto County, Ohio (171766).

SLATTERY, R. G., and HUGH STABLER, Washington, D. C.: Skeletal remains from the W. A. Walker site No. 1, on Selden Island (in the Potomac River), Montgomery County, Md. (171763); 3 skeletons from the W. R. Winslow site, located on the Maryland side of the Potomac River, just opposite Van Devanter Island, Montgomery County, Md. (171765).

SLUTZ, Mrs. EUGENE K., Huntington, W. Va.: An example of lacework, darning on net, typical of the 1830's, which was made at Point Pleasant, W. Va., by a member of the Roseberry family (171915).

SMALLWOOD, KEN MAYNARD, Fairfax, Va.: 1 saw-whet owl (171862).

SMITH, Dr. A. C. (See under Harvard University, Arnold Arboretum.)

SMITH, ALVIN, Laurel, Md.: 1 woodchuck from Laurel (170914).

SMITH, Prof. CHARLES PIPER, Saratoga, Calif.: 11 plants from California (170868, exchange).

SMITH, Mrs. GRACE CHAFFEE, Richford, Vt.: 1 squirrel skin used as a purse by great-grandfather of the donor (172477); 4 examples of needlework, period of 1849–1856, worked by Ursula Chaffee, of Berkshire, Vt., and her daughters Precinda and Matilda (173352).

SMITH, G. STACE, Creston, British Columbia: 2 beetles (171413).

SMITH, Dr. HUGH M. (deceased): 4 parasitic isopods (88796).

SMITH, Mrs. LUCY CRANWELL, Arlington, Va.: 4 grasses from New Zealand (171284).

SMITH, Dr. LYMAN B. (See under Harvard University, Gray Herbarium.)

SMITHSONIAN INSTITUTION, Washington, D. C.: 18 copper plates containing work in etching, aquatint, and drypoint by Charles W. Dahlgreen (170825); engraving in mezzotint of "Dobson's Father," by Valentine Green, after the painting by William Dobson (171200); embroidered white silk-crepe shawl, obtained from Canton, China, about 1850 and bequeathed to the Smithsonian Institution by Bertha M. Robbins (171419); porcelain cup and saucer made at Swansea, Wales, about 1820 (171559). Deposit.

Bureau of American Ethnology: 1 elk-horn quirt, obtained from the Pawnee Indians near Columbus, Nebr., about 1870, by Dr. Elon J. Lawton of Rome, N. Y. (171677).

National Museum, collected by members of the staff: Foshag, Dr. W. F.: 487 specimens of minerals, rocks, and ores, from various districts of Mexico (172387); Morrison, Dr. J. P. E.: 60 bird skins, 1 bird in alcohol, 2 bird eggs, and 9 mammals from Bikini Atoll, South Pacific, collected on Crossroads Project (172309); Wedel, Dr. Waldo R.: Archeological materials collected in 1940 through excavations in proto-historical village sites in Rice and Cowley Counties, Kans., with small surface collections from other sites in Oklahoma and Nebraska; also two mollusks (168599); Wetmore, Dr. Alexander: 10 specimens of minerals and rocks from the Pearl Islands, off Panama (171831); Wetmore, Dr. A., and J. E. Graf: 2 birdskins, 1 rattlesnake, 10 plants, 8 mammals, 700 insects, and a small collection of miscellaneous insects, 9 mammals, 3 birds, and 4 salamanders from the Shenandoah Valley, Va. (171050, 171231); Wetmore, Dr. A., and W. M. Perrygo: 637 bird skins, 2 bird skeletons and alcoholics, 1 set of bird eggs, and 1 nest, mammals and echinoderms, all collected in Darién, Panama, March–April 1946 (172120).

National Museum, obtained by purchase: Seamless, single-weave, jacquard coverlet having blue-dyed cotton warp and dyed-wool weft of red, blue, and olive-green, woven in 1847 by H. & A. Seifert, Mechanicsburg, Cumberland County, Pa., for Daniel Baker (1821–1905) of Church Town, Pa. (170812); 94

plants from Venezuela, collected by Capt. F. Cardona (171281); 25 North American mosses (171552); 3 mounted skins of fishes (171651); 2 mounted skins of fishes (172399); 100 plants from St. Lucia (172620); a vertical, chairlike, 2-spindle flax wheel with double-treadle drive (172702); collection of 570 mounted diatom slides and 20 samples of cleaned diatom material (172715); 300 plants from Dominica and Grenada (173193); oil painting by Kate T. Cory of the Hopi Indian "Sun Ceremony—the planting of the feathers by the whole village to the sun at the time of the winter solstice" (173351); 2,400 photographs of plants in European herbaria (173357).

National Museum, made in Museum laboratories: Landscape model of the first iron truss railroad bridge in America (1845), showing a portion of the Philadelphia & Reading Railroad near Manayunk, Pa. (171648).

National Museum, Division of Birds: 121 lithographs and engravings of birds, including prints after Audubon, Hergenroeder, and Gabler (170817); 25 specimens of lice in 5 species, combed from bird and mammal skins in the Museum collections, which have been studied by F. L. Werneck, 2 species represented by types, one also having the allotype (172233).

National Zoological Park: 11 mammals (172395); 8 birds (172483); 1 snake (172753).

SOPER, JAMES H. (See under Canadian Government, Department of Agriculture.)

SORENSEN, A., Pacific Grove, Calif.: 39 mollusks from Midway Island (170240); 2 crabs (170614); 8 mollusks from the Kwajalein Atoll, Marshall Islands (171114); a collection of Crustacea from the west coast of Mexico (173206).

SOUKUP, Dr. J., Lima, Peru: 94 plants from Peru (170728, 171793, 173119).

SOUTH AFRICA DEPARTMENT OF AGRICULTURE, *Botanical Station*, Durban, South Africa: (Through Helena M. L. Forbes) Seeds of a palm (172888).

SOUTH AUSTRALIAN MUSEUM, Adelaide, South Australia: (Through Dr. Herbert M. Hale) 2 fishes from Port Willungua, Australia (171000, exchange).

SOUTHERN CALIFORNIA, UNIVERSITY OF, *Allan Hancock Foundation*, Los Angeles, Calif.: (Through Dr. Irene McCulloch) About 440 specimens of marine algae from the Allan Hancock Expeditions to the Galápagos Islands (170722, exchange).

SOUTHERN METHODIST UNIVERSITY, Dallas, Tex.: 508 plants, mostly from Texas (173113, exchange).

SOUTHERN RHODESIA, NATIONAL MUSEUM OF, Bulawayo, Southern Rhodesia: (Through Dr. George Arnold) 43 ants, representing 12 species, 3 of which are represented by 7 paratypes (171377).

SOUTHWEST MUSEUM, Los Angeles, Calif.: 2 leaves of an astrological manuscript in Tamil incised on prepared sections of palm leaf (172060).

SOUTHWORTH, CHARLES, Thedford, Ontario: 700 Middle Devonian brachiopods from southwestern Ontario (172428).

SPRINGER FUND, Smithsonian Institution: 6 Middle Ordivician crinoids from Ontario (172194); 4 Devonian crinoids from Sylvania, Ohio (172884).

STABLER, HUGH. (See under R. G. Slattery.)

STABLER, SYDNEY SNOWDEN, Hyattsville, Md.: A Babcock milk tester made by the Vermont Farm Machine Co., Bellows Falls, Vt., and used about 1885 at Brighton Farm, Patuxent River, Montgomery County, Md., by the donor's father (173353).

STANFORD UNIVERSITY, Stanford University, Calif.: 5 mollusks (172760); 255 ferns from Ecuador (171146, 172495, 172831, exchange); (through Dr. Albert W. Herre) 33 paratypes involving 6 species of fishes from the Philippines and India, collected by Dr. Herre (171582); (through Mrs. Roxana S. Ferris) 403 plants, mostly from the Sonoran Desert region (172936, exchange).

STARK, ROBERT J., Grapevine, Tex.: 1 gastropod from Palo Pinto County, Tex. (172072); 32 gastropods from the Pennsylvanian, south of Santo, Palo Pinto County (172492).

STEARNS, Dr. H. T., Honolulu, Hawaii: Skull and lower jaw from an Indian mound near Lodi, Calif., and a damaged skull from Lanai, Hawaii (172376).

STEBBINS, Dr. G. LEDYARD, Jr., Berkeley, Calif.: 46 grasses from California (171984).

STEERE, Lt. RUSSELL L., Ann Arbor, Mich.: 263 plants from Guam (172231).

STEERE, Dr. WILLIAM C. (See under Foreign Economic Administration.)

STEHLÉ, Dr. H., Fort-de-France, Martinique: 200 plants from Guadeloupe and Martinique (170799); a collection of miscellaneous insects and 2 reptiles from Martinique (171004); 13 lizards and 1 crab from Hots des Saintes, Terre de Haute (171744).

STEIDEMANN, T/4 ROBERT E., A. P. O., San Francisco, Calif.: 46 plants from Okinawa (172470).

STEPHENSON, WILLIAM J. (See under George A. Robertson.)

STERLING, RICHARD T., Washington, D. C.: 1 mollusk from Casco Bay, Maine (172386).

STEVENS, Dr. BELLE A. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

STEWART, Mrs. W. W., Washington, D. C.: 1 mounted deer head (172551).

STIRLING, MATTHEW W., Washington, D. C.: A collection of reptiles and amphibians, fish, a mammal, marine invertebrates, and insects from Piedra Parada, Chiapas, Mexico, made in March, April, and May 1945 (170571); a collection of reptiles, amphibians, fishes, insects, and 1 crab from San Lorenzo, Veracruz (173104).

STONE, BENTON, Negritos, Peru: 51 specimens of Upper Cretaceous Foraminifera (173094).

STOVER, Lt. (jg) J. H., F. P. O., San Francisco, Calif.: 6 snakes from Okinawa collected by the donor on May 20, 1945 (170800).

STYRON, SADE C., Washington, D. C.: A camera, Tele-Photo Cycle Poco, about 1896, an exposure meter, a ray filter, and a portrait lens (172639).

SUMNER, Mrs. MARGARET E., La Jolla, Calif.: An appliqued garment formerly worn by a Sudanese follower of the Mahdi, collected in 1899 by the late Dr. F. B. Sumner (173382).

SWALLEN, J. R., Washington, D. C.: 128 plants from Brazil (170827).

TANNER, Dr. VASCO M., Provo, Utah: 6 frogs from Provo, Utah County, Utah, collected in September 1944 by the donor (170936).

TAYLOR, Mrs. A. R., Arlington, Va.: A Jeffreys' oral respirator (172397).

TAYS, GEORGE. (See under Hugo Gunckel.)

TEICHERT, Dr. CURT, Melbourne, Victoria: 65 plates of a peculiar fossil crinoid from the Permian of West Australia (172751).

TEXAS, UNIVERSITY OF, Austin, Tex.: (Through Dr. A. Packchanian) 1 insect (171700); 35 plants (171778, 172133, exchange); (through Fred A. Barkley) 78 plants from Colorado and Texas (172961, 173289).

TEXTILE COLOR CARD ASSOCIATION OF THE UNITED STATES, INC.; New York, N. Y.: (Through Margaret Hayden Rorke) 2, 1946 fall-season color cards of America, one containing woolen swatches in winter tints, autumn pastels, and colors of the tropics, the other a rayon collection featuring "Holiday Hues" and "Jewels of the Orient" colors (173277); 2 1945 fall-season color cards of America, one containing woolen swatches in overtones and pastels, the other a rayon collection featuring Chinese dynasty colors, also a folder of VE-day service colors (170864).

THATCHER, T. O., Berkeley, Calif.: (Through Dr. J. Stewart Williams), Cambrian echinoderm from mouth of Antelope Spring Canyon, House Range, Millard County, Utah (172289).

THOENES, JOHN W., St. Louis, Mo.: 21 plants from the Aleutian Islands (171881).

THOMAS, JAMES H., Oneonta, N. Y.: 5 pictorial photographs (172623).

THOMAS, Dr. W. B. S., Dover-Foxcroft, Maine: 13 fossil fishes, found 100 miles up Sundrastrom Fiorde on the west coast of Greenland at the Arctic Circle (172975).

THOMAS, Maj. WILLIAM B. S., Washington, D. C.: (Through Capt. C. Brooke Worth) 268 miscellaneous insects, including about 200 mosquito larvae and 23 Lepidoptera from Okinawa; 20 adult mosquitoes and 1 fish from Ulithi; and 1 snake from Tinian (171334); a small collection of miscellaneous insects, centipedes, and spiders; fishes; marine invertebrates; salamanders, lizards, and snakes; mollusks; birds; mammals; 2 wooden saddles and 1 straw mat, all from Okinawa (171912).

THOMPSON, Capt. G. A., Miami, Fla.: 25 mosquitoes, representing 4 species, including adults of both sexes and larval and pupal skins (172014). (See also under Federal Security Agency, Public Health Service.)

TIDD, Dr. WILBUR M., Columbus, Ohio: 15 amphipods from Ohio (171391). (See also under Ohio State University, Department of Zoology.)

TITTERINGTON, Dr. P. F., St. Louis, Mo.: Approximately 430 specimens of Indian skeletal remains from various counties in Illinois, Arkansas, and Missouri, together with X-ray plates of selected skulls from this collection made by Dr. Sherwood Moore (169839); skeletal material from Calhoun, Jersey, and St. Claire Counties,

Ill., collected during 1945 (171328); portions of 3 skulls and a few long bones from Calhoun County, Ill. (172356).

TITTLE, WALTER, Danbury, Conn.: 25 drypoint portraits by the donor of statesmen at the Conference on Limitation of Armaments held in Washington, D. C., 1921–1922 (172653).

TOBLER, ERNST & TRABER, INC., New York, N. Y.: A collection of 139 study samples of Swiss bolting cloth, representing different grades and meshes, manufactured from Italian raw silk by Dufour & Co. (171278).

TOLMAN, RUEL P., Washington, D. C.: 14 etchings, 4 drypoints, and 1 lithograph by Ruel P. Tolman and 1 aquatint, "Cromwell at the Coffin of Charles I," engraved by George Maile after the painting by Paul Delaroche (172067).

TOMÁS, Brother ALBERTO, Salamina, Colombia: 92 plants from Colombia (170725, 171280).

TORRE, Dr. CARLOS DE LA, Marianao, Cuba: 49 Cuban land shells (172518).

TOWNES, Dr. H. K., Washington, D. C.: 3 amphipods and 6 crayfishes (171532). (See also under U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine.)

TREASURY DEPARTMENT. *Bureau of the Mint*, Washington, D. C.: Peary Polar Expedition Medal, 1908–1909 (168637); 30 United States coins struck at the Denver, Philadelphia, and San Francisco mints in 1945 (172711).

Bureau of Customs, Washington, D. C.: (Through G. H. Griffith) 4 mounted birds from Italy (171294); (through Procurement Division), 3 cut aquamarines, weighing 73.50, 13 and 11.15 carats; 1 cut amethyst, weighing 31.85 carats; and 1 cut green tourmaline weighing 10.20 carats, from Brazil (171598); 1 blue cut topaz and 2 pear-shaped emeralds (171968).

Procurement Division. (See under Treasury Department, Bureau of Customs.)

TREY, DAVID G., College Park, Md.: 20 plants from Idaho and Washington (171155).

TUERK, Capt. MILTON, A. P. O., New York, N. Y.: 14 plants from Burma (170802, 171433).

TURNPAUGH, W. S., Monterrey, Nuevo León: 1 spider (171132).

TWENTY-FOURTH CORPS, U. S. Army, A. P. O., San Francisco, Calif.: (Through Lt. Gen. John R. Hodge) Japanese Shinto sword with ceremonial hilt and cloth trappings (172742).

ULKE, Dr. TITUS, Washington, D. C.: 2 plants from Maryland (172997); 3 ferns from Virginia (173280); 1 plant (173354); 2 plants from the District of Columbia and Virginia (173040).

UNDERWOOD, Mrs. H. W. (See under Mrs. Calvin Coolidge.)

UNDERWOOD, Mrs. P. O., Detroit, Mich.: Types of 3 species of mollusks, including a new genus (6 specimens) (171460).

UNITED STATES OF AMERICA TYPHUS COMMISSION, Washington, D. C.: 7 rats from the Philippines, forwarded by Lt. Col. Cornelius B. Philip (170631); 1 bat, 2 shrews, and 14 rodents from the Philippine Islands (170876); 77 birds and 33 mammals from Burma (170943); 42 mammals from Burma (170949); 1 shrew and 7 rats (171149); 10 bird skins, 10 bird skeletons from Montana; mammals; reptiles and amphibians; insects, mites, etc. (171223); 3 turtles, 6 snakes, and 7 lizards; 296 small mammals: 82 birds from Burma, India, and China (171678); large collection (3,108 specimens) of plants from Burma and Assam (171833); 13 rodents (3 adult and 10 young) collected by Lt. Col. Cornelius B. Philip (171920); (through Dr. Wm. L. Jellison and the Federal Security Agency, U. S. Public Health Service, Hamilton, Mont.) a collection of miscellaneous insects, snakes, and fishes from Assam and Burma (172701); (through Lt. Col. Cornelius B. Philip) 13 slides of mites from Japan and the Philippine Islands, representing 11 species, including the type and paratypes of 2 new species (172804).

URQUHART, Dr. F. A. (See Canadian Government, Royal Ontario Museum of Zoology.)

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah (Through Dr. George F. Knowlton): 1 type slide of a species of aphid (172205).

VAIDEN, M. G., Rosedale, Miss.: 2 song sparrows (172481).

VAIL, RICHARD. (See under Robert Waskey.)

VANCE, Capt. DEANE H., Washington, D. C.: Earthenware jar from the Pueblo of Zuni, found by donor's father, Joseph R. Vance, in the Mesa Verde about 1880 (171670).

VAN EMDEN, Dr. FRITZ, London, England: 9 beetle larvae, representing 6 species, all new to the collections (152061).

VAN SCHAACK, Lt. GEORGE B., West Coxsackie, N. Y.: 500 plants from Attu Island (171630).

VARGAS, Dr. CESAR, Cuzco, Peru: 50 plants from Peru (172497).

VARGAS, Prof. JESÚS MENDOZA, Veracruz, Veracruz: 20 land shells from Veracruz (171323). (See also under Mexican Government, Oficina Fitosanitaria.)

VARGAS, Dr. LUIS, Anahuac, D. F., Mexico: 34 flies, all paratypes (171346).

VASTINE, Estate of Dr. HARRY M., Harrisburg, Pa.: (Through Mrs. Leon Klepper and Dr. Riley D. Moore) A framed typewritten copy of a speech on "Immortality," delivered on May May 24, 1912, by Dr. A. T. Still, founder of osteopathy (170788).

VAUGHAN, Dr. GEORGE TULLY, Washington, D. C.: A combination knife-fork implement used by an amputee, William Henry Thelwall, a Confederate soldier of the Civil War (172522).

VAUPELL, C. W., Mexico, D. F.: 1 specimen of livingstonite and 1 of scheelite and cuproscheelite from Mexico (172389).

VERRILL, A. HYATT, Lake Worth, Fla.: 5 crabs, 1 stomatopod (170592).

VERROW, HAROLD J., Hartford, Conn.: 1 specimen of knebelite from Long Mountain, Stark, N. H. (170804).

VIKEN, A. J., Manhasset, Long Island, N. Y.: 1 4-x-5 Eastman magazine plate camera of 1887 and 1 volume of panorams of the estate of Mrs. George D. Pratt at Glen Cove, Long Island (171583); a mounted enlarged photograph of the old Slater Mill, Pawtucket, R. I., and 2 small prints, 1 from the original negative taken by the donor on January 20, 1945, the other after retouching to remove the present surrounding buildings from the landscape; also 2 small prints of the bronze plate now on the door of the Old Mill (171742); 1-Scovill View Camera, 5-x-8–1885, 1–B&L rectilinear lens in Unicum shutter; 2 5-x-8 plate holders; 2 circular negatives from Detective camera; 3 prints from circular negatives; 1 enlargement from circular negatives (171985).

VIRGINIA, UNIVERSITY OF, *Blandy Experimental Farm*, Boyce, Va.: 6 grasses from Virginia (171591).

VITALIANO, CHARLES J., Gabbs, Nev.: 2 crystalline greenish brucite specimens from Gabbs (171077).

VOGT, Lt. GEORGE B., Catonsville, Md.: 13 mosquito specimens (171759).

VOGT, WILLIAM, Washington, D. C.: 1 mollusk from Laguna de San Rafael, Chile (172230).

VOKES, Dr. H. E., Baltimore, Md.: 250 Pennsylvanian invertebrate fossils from near Moab, Utah (171412).

VON BONDE, Dr. CECIL, Cape Province, South Africa: 500 copepods (172700).

WAGNER, Lt. (jg) WARREN H., Jr., Washington, D. C.: 84 ferns from the South Pacific region (171554); 2 ferns from Virginia (172131); 1 fern from Hawaiian Islands (172346); 2 plants from Maryland (172460); 1 fern (172553); 18 plants from Kwajalein Atoll (172734); 42 ferns from the Pacific Islands (172757); 2 ferns (172806).

WALCOTT FUND, CHARLES D., Smithsonian Institution: 2,100 fossil mollusks from the Lord Calvert collection (160498); 400 blocks of Permian limestone containing silicified invertebrate fossils and 500+ invertebrate fossils from the Permian of the Glass Mountains and 5,000+ invertebrates fossils from Devonian, Mississippian, and Pennsylvanian rocks of central Texas, collected for the Museum by Dr. G. Arthur Cooper and Dr. J. Brookes Knight (170496, collected for Museum); approximately 5,000 Ordovician invertebrate fossils collected by Dr. G. Arthur Cooper and Dr. Byron N. Cooper in Virginia, Tennessee, Alabama, and Georgia (172055); approximately 5,000 specimens of Mississippian and Pennsylvanian invertebrate fossils from the central uplift of Texas, collected by Dr. G. Arthur Cooper (172710); 32 Devonian brachiopods and 4 pelecypods from Sylvania, Ohio (172883).

WALKER, Dr. E. H., Washington, D. C.: 2 plants from District of Columbia and vicinity (172455).

WALKER, J. B., Washington, D. C.: 12 plants from Texas (173179).

WALLACE, Capt. CECIL T., Washington, D. C.: A collection of 21 pearls from White River (near Roe), Ark., collected in 1935 (170886).

WALLING, Mrs. MARIE STERN, St. Paul, Minn.: (Through Dr. Riley D. Moore) 5 specimens dealing with the early history of osteopathy in Minnesota and Iowa (170787).

WAR DEPARTMENT, *Army Medical Center*, Washington, D. C.: (Through Capt. C. Brooke Worth) A small collection of natural-history material comprising insects, mollusks, reptiles, 4 fishes and invertebrates, 3 mice, and echinoderms collected by Maj. William B. S. Thomas on Okinawa Island (171505); 4 bats taken in building at Army Medical Center by Capt. C. Brooke Worth,

MC, August 8, 1945 (171063); 1 house mouse, insects, reptiles, and marine invertebrates from Oahu (171520).

Army Medical Museum, Washington, D. C.: 1 rat (170575); 1 civet and 4 rats, from the 31st Malaria Survey Detachment, Philippines (170629); 43 rats from the Philippines, forwarded by 31st Malaria Survey Detachment (170630); 21 rats and 1 shrew forwarded by Capt. Carl O. Mohr from the Philippine Islands (170714); 41 rats and mice, forwarded by the 217th Malaria Survey Detachment from the Marianas Islands (170761); 7 rodents from New Guinea, forwarded by the 19th Medical General Laboratory (170877); 1 civet cat forwarded by Capt. Carl O. Mohr (170902); 21 small mammals from the Philippine Islands, forwarded by Lt. Howard A. Bern (171048); 61 rodents collected by T/5 Dwain W. Warner (171055); 10 rats from the Philippines, forwarded by Capt. Carl O. Mohr (171112); 14 small mammals collected in the Philippines, forwarded by Capt. Floyd J. Brinley (171113); 350 fresh-water gastropods collected by Maj. Harry J. Bennett in Mindanao, Philippine Islands (171135); 1 rodent forwarded by T/4 J. J. Bordenave (171141); 7 rats, 1 mouse, and 2 shrews forwarded by Capt. Donald J. Pletsch (171202); 7 rats and 5 shrews forwarded by Capt. Floyd J. Brinley, 207th Malaria Survey Detachment (171331); 18 small mammals forwarded by Lt. Howard A. Bern, Headquarters, 32d Malaria Survey Detachment (171332); 70 small mammals, forwarded by Capt. Harry Hoogstraal, 19th Medical General Laboratory, AFWESPAC (171351); 42 small mammals forwarded by Capt. Carl O. Mohr, 211th Malaria Survey Detachment (171352); 37 bats, 2 rodents, forwarded by Capt. Carl O. Mohr, 211th Malaria Survey Detachment (171351); 42 small mammals forwarded by Capt. Wayne L. Howe, 31st Malaria Survey Detachment (171392); 2 rodents forwarded by Capt. Carl O. Mohr (171611); 2 rodents, mites forwarded by 423d Malaria Survey Detachment (171686); 26 rodents, 8 bats, 94 birds, parasites, and insects (171749); 47 small mammals (171750); 7 rats, 4 bats, and 52 birds (171846); 5 rodents forwarded by 25th Malaria Control Detachment (171955); 11 bird skins from Saipan (171973); 17 rodents, 32 birds, and 5 vials of ectoparasites forwarded by Capt. Joe T. Marshall, Jr., SnC. (172154); 6 rats forwarded by Capt. Henry H. Richardson, SnC. (172430); 11 small mammals from Camp Crowder, Mo. (172626); 378 specimens of mosquito material from France (173095); 45 rodents and 1 bird forwarded by the 218th Malaria Survey Detachment (172819); small collection of flies collected at Hollandia, Netherlands New Guinea, and at Palo, Leyte, Philippine Islands, during 1945, by 19th Medical General Laboratory entomologists (173377); (through Maj. H. A. Davis) 1 fish from tidal pool of coral reef, collected at Okinawa, June 24, 1945 (171053); 4 snakes from Hamahika-shima, Okinawa, collected on May 17, 1945, by Maj. Harvey G. Taylor (171125); 7 fishes, 11 geckos, 12 skinks, 26 crabs, 2 hermit crabs, 1 hippa, 5 amphipods, 2 shrimps, 1 sipunculid, 2 leeches, 1 polychaet worm, 1 seacucumber, 1 echinoderm, 4 insects, and 45 mollusks (171297); 2 snakes, 1 burrowing lizard, and 1 gerbil from Ahwaz, Iran, collected by Lt. Samuel Pollock, 19th Station Hospital (171364); 10 frogs and 3 snakes from Leyte, Philippine Islands, collected by Capt. Donald J. Pletsch (171388). (See also under War Department, 19th Medical General Laboratory.)

Army Medical School, Washington, D. C.: 94 mollusks and 1 leech (171748).

Eighteenth Medical General Laboratory, A. P. O., San Francisco, Calif.: Collection of crustaceans, reptiles, amphibians, and mollusks from the Philippines and Marianas (171519); 13 specimens of mosquito material (171621).

Eighth Service Command, Fort Sam Houston, Tex.: (Through Maj. Theodore A. Olson) 6 beetles from Texas (171096).

Fourth Service Command Medical Laboratory, Fort McPherson, Ga.: (Through Capt. Virgil I. Miles) 83+ flies (172452); through Lt. Roy W. Rings, Sn. C.) 1 mosquito collected at Hunter Field, Ga. (172650).

Frankford Arsenal, Philadelphia, Pa.: Display case containing 118 specimens of United States small arms ammunition (171016).

Military Intelligence Service, Washington, D. C.: Japanese free balloon launched in Japan and landed in the United States in 1945 (171557).

Nineteenth Medical General Laboratory, A. P. O., San Francisco, Calif.: (Through Army Medical Museum) 150 specimens of mosquito material comprising 36 males, 46 females, 68 larvae, representing 7 species of which 4 are represented by 3 allotypes and 4 holotypes, collected by Lt. Col. W. V. King and Capt. Harry Hoogstraal in the Philippines (171550).

Office of the Quartermaster General, Washington, D. C.: 66 study samples of various textile fabrics, etc. (172295).

Office of the Surgeon General, Washington, D. C.: 1 monkey from the Philippine Islands (170634); (through Lt. Col. O. R. McCoy) 42 mollusks from the Malir River at Karachi, India (171115); 27 freshwater mollusks from Hunan Province, China (171151); (through Lt. Col. Gaylord W. Anderson) 73 freshwater shells from China (171526); 72 mollusks, including type (171572); 1 Philippine monkey skeleton (172180); (through Lt. Col. W. V. King and Capt. Harry Hoogstraal) 183 specimens of mosquito material from the Philippine Islands and New Guinea (172451); (through Lt. Col. W. V. King) 20 specimens of mosquito material representing 3 species by types, the others all paratypes; 5 genitalic slides, 1 larval slide (172290).

Ordnance Department, Washington, D. C.: Model of United States Army truck, class B, 3–5 ton, model 1917 (173266).

Philadelphia Quartermaster Depot, Philadelphia, Pa: United States Army insignia of World War II (172213).

Two hundred twenty-second Malaria Survey Detachment, A. P. O., San Francisco, Calif.: (Through Capt. Frank N. Young, Jr.) 45 flies (171148).

Topographic Models Section, Office of Strategic Services, Washington, D. C.: Topographic maps of World War II (171937); 18 photographs of military maps of World War II (172941).

WARD, Estate of HENRY B.: (Through Charlotte B. Ward) 8,000 lots of helminths (171707).

WARD'S NATURAL SCIENCE ESTABLISHMENT, Rochester, N. Y.: 1 specimen of crytolite from Ambatofotsy, Madagascar, and 1 specimen of zunyite from Arizona (170767, exchange); (with cooperation of Roebling Fund) 6 descloizite and one pollucite mineral specimens from Southwest Africa (172601, gift, exchange).

WARFEL, HERBERT E., New Haven, Conn.: 20 cladocerans, 75 copepods (171600).

WASHINGTON, UNIVERSITY OF, Seattle, Wash.: (Through Dr. C. Leo Hitchcock) 1,110 plants from Idaho and Montana (170721, 172886, exchange).

WASHINGTON UNIVERSITY, St. Louis, Mo.: (Through Dr. Courtney Werner) 1 rare brachiopod from the Pennsylvania rocks of St. Louis County, Mo. (171979, exchange).

WASKEY, ROBERT, Frankfort, Ind.: (Through Alfred Wilson and Richard Vail) Specimens of cassiterite, tantalite, and columbite from Kalima, Maniema District, Belgian Congo, and a specimen of lepidolite from near Coolgardie, Western Australia (7 specimens in all) (171639).

WEBER, JAY A., Miami, Fla.: 50 mollusks from Florida (167494); 1 king rail (170603).

WEBSTER, DWIGHT A. (See under Cornell University.)

WEDEL, Dr. WALDO R. (See under Smithsonian Institution, National Museum.)

WEISS, Mrs. SOPHIE HEBERTON. (See under Estate of Sophie P. Casey.)

WELLS, ISABELLA C. (See under estate of Mary Louis Frederick.)

WERNER, Dr. COURTNEY. (See under Washington University.)

WESTBROOK, Mrs. LOUISE C. (See under Mrs. Estelle Randall Carlin.)

WETMORE, Dr. A., Washington, D. C.: 2 white-footed mice collected in Shenandoah National Park, Va. (170887); 53 birds from Virginia (171580, 173347); photograph of George Charles Champion, English entomologist (1851–1927) (171884); 7 bird skins (172128); 1 winter wren (172291). (See also under Smithsonian Institution, National Museum.)

WETZEL, J. B., Seat Pleasant, Md.: 1 osprey (171198).

WHARTON, Lt. GEORGE W., H(S), U. S. N. R. (See under Navy Department, Naval Medical Research Unit No. 2.)

WHATLEY, JOHN, Bowdon, Ga.: A "Quaker sewing machine" patented in 1858 (148206).

WHITCOMB, Prof. LAWRENCE, Bethlehem, Pa.: 73 Middle Ordovician brachiopods from Pennsylvania (172353).

WHITE, Mrs. ELIZABETH J. (See under Quota Club International, Inc.)

WHITE, Brig. Gen. THOMAS D., Arlington, Va.: 153 fishes and some mollusks and shrimps from Saipan and Leyte (171529).

WHITESELL, WOOD, New Orleans, La.: 58 pictorial photographs exhibited during May 1946 (173078, loan).

WIGGINS, Prof. IRA L. (See under Foreign Economic Administration.)

WILLAUER, Mrs. WHITING, Arlington, Va.: Cotton "Liberty" quilt made in Connecticut about 1800 by Hannah Thomson and taken to Dayton, Ohio, by prairie schooner when the Thomson family migrated (183386, loan).

WILLIAMS, C. C., Friendship, Maine: 1 carved black horn spoon, obtained in the Aleutian Islands in 1888 by the donor's father, a naval officer on the *Albatross* (171249).

WILLIAMS, FRITZ H., Benton, Ill.: 108 marine mollusks from Eniwetok, Marshall Islands (171524).

WILLIAMS, Dr. J. STEWART. (See under T. O. Thatcher.)

WILLIAMS, Dr. L. O. (See under Harvard University, Botanical Museum.)

WILLIAMS, Mr. and Mrs. MILO W., Sarasota Bay, Fla.: Collection of marine invertebrates, insects, echinoderms, fish, and mollusks from Sarasota Bay (167697).

WILLIAMS, Mrs. NORMA C., Falls Church, Va.: Collection of North American birds' eggs (172535).

WILLIM, REM. PEDRO, Colonia Nueva Italia, Paraguay: 1 skin of Argentine tanager (172736).

WILSON, ALFRED. (See under Robert Waskey.)

WILSON, Dr. Alice E. (See under Canadian Government, Geological Survey.)

WILSON, CHARLES B., Miami, Okla.: 29 lithographs by Charles B. Wilson, for special exhibition, January 7 through February 3, 1946 (171987, loan); lithograph by the donor entitled "Freedom's Warrior" (172561).

WILSON, LAURENCE L., A. P. O. San Francisco, Calif.: 2 flint flakes found in gravels of Zambezi River near Livingstone, Northern Rhodesia, Africa (171067).

WINSTON, J. M. (See under U. S. Maritime Commission.)

WISCONSIN, UNIVERSITY OF, Madison, Wis.: 3 mollusks (170892); 65 lichens from the United States (171866); (through Dr. Norman C. Fassett) 51 plants, mostly from the United States (172108). All exchange.

WISE, FRANCIS A., Tucson, Ariz: 1 specimen of diaboleite from Mammoth mine, Tiger, Ariz. (173167).

WOLF, Rev. Father, St. Bernard, Ala.: 1 hybrid oak from Alabama (171645).

WOLFE, Col. L. R., Washington, D. C.: 7 eagle skins from Manchuria (172583).

WOLFF, Capt. ALBERT E. (See under Juan Ivan Cueva.)

WOODRUFF, Lt. Col. CHARLES E. (deceased): (Through Mrs. C. M. Perkins) Baskets, fur shirts, pipes, and bow and arrow collected by the donor in 1890 from the Hupa Indians on their California reservation; also miscellaneous ethnological specimens from the Plains Indians and from the Philippine Islands (173350).

WORTH, Capt. C. BROOKE, Washington, D. C. (See under War Department, Army Medical Center, Lt. Theodore Downs, and Maj. Wm. B. S. Thomas.)

WRIGHT, Mrs. JAMES A., New York, N. Y.: (Through Lawrason Riggs) Oil portrait of Capt. John Lee Davis by Nathan Hughes, and a water color drawing of the U. S. S. monitor *Montauk* by A. C. Stuart (149313).

WRIGHT, Mrs. JENNIE WARRICK, Rock Island, Ill.: 1 sanding box used for drying ink on quill-written manuscripts (172634).

WRIGHT, M. K. (See under Baldwin Locomotive Works.)

WYGODZINSKY, Dr. PETR, Rio de Janeiro, Brazil: 7 insects (173281, exchange).

WYOMING, UNIVERSITY OF, Laramie, Wyo.: (Through Prof. C. L. Porter) 257 plants from Oklahoma, Colorado, and Wyoming (172602, exchange).

YALE UNIVERSITY, *School of Forestry*, New Haven, Conn.; 4 specimens of tropical American woods (172251, exchange).

YOUNG, Dr. FRANK N., Jr., Gainesville, Fla.: 500 specimens of Lepidoptera from Florida and Mexico (173205). (See also under War Department, 222d Malaria Survey Detachment.)

YU-TSENG, Dr. HSI, Beltsville, Md.: 1 plant (172619).

ZARROW, Lt. M., A. P. O., San Francisco, Calif.: 1 pipefish, 1 sea snake, and a small collection of insects (170759).

ZETEK, JAMES, Balboa, Canal Zone: About 200 mollusks from Panama (170797).

ZIESENHENNE, Lt. Comdr. FRED C., F. P. O., San Francisco, Calif.: 18 marine shells from the Caroline Islands (171214); 26 crabs, 6 hermit crabs, 1 fish, 3 starfishes, 3 sea-cucumbers, mollusks (171437); 8 crabs, 3 sea-cucumbers, 3 sea-urchins, 5 starfishes (171565); 22 hermit crabs collected on Cocos Island, September 1945 (171719).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1945–46

REPORTS

Report on the progress and condition of the United States National Museum for the year ended June 30, 1944. 8vo, iii+100 pp. January 5, 1946.

Report on the progress and condition of the United States National Museum for the year ended June 30, 1945. 8vo, iii+112 pp. June 28, 1946.

BULLETINS

Bulletin 185, part 4. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Compiled by Richard E. Blackwelder. 8vo, pp. 551–763. May 13, 1946.

Bulletin 186. The birds of northern Thailand. By H. G. Deignan. 8vo, v+616 pp., 4 maps, 9 pls. September 17, 1945.

Bulletin 187. An annotated checklist and key to the snakes of Mexico. By Hobart M. Smith and Edward H. Taylor. 8vo, iv+239 pp. October 5, 1945.

Bulletin 188. The fresh-water fishes of Siam, or Thailand. By Hugh M. Smith. 8vo, xi+622 pp., 107 figs., 9 pls. November 13, 1945.

Bulletin 189. A descriptive catalog of the shore fishes of Peru. By Samuel F. Hildebrand. 8vo, xi+530 pp., 95 figs. February 26, 1946.

Bulletin 190. The North American clear-wing moths of the family Aegeriidae. By George P. Engelhardt. 8vo, vi+221 pp., 32 pls. (16 in color). June 28, 1946.

PAPERS PUBLISHED IN SEPARATE FORM

FROM VOLUME 96 OF THE PROCEEDINGS

No. 3195. *Hyporhamphus patris*, a new species of hemiramphid fish from Sinaloa, Mexico, with an analysis of the generic characters of *Hyporhamphus* and *Hemiramphus*. By Robert R. Miller. Pp. 185–193, fig. 9, pl. 11. July 27, 1945.

No. 3196. Notes on recently mounted reptile fossil skeletons in the United States National Museum. By Charles W. Gilmore. Pp. 195–203, pls. 12–19. February 5, 1946.

No. 3197. The onychophores of Panama and the Canal Zone. By Austin H. Clark and James Zetek. Pp. 205–213. February 21, 1946.

No. 3198. Echiuroid worms of the North Pacific Ocean. By Walter Kenrick Fisher. Pp. 215–292, figs. 10–19, pls. 20–37. April 11, 1946.

No. 3199. The osteology of the fossil turtle *Testudo praeextans* Lambe, with notes on other species of *Testudo* from the Oligocene of Wyoming. By Charles W. Gilmore. Pp. 293–310, figs. 20–27, pls. 38–44. March 28, 1946.

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